



THE

# Importance Of Sleep

Workbook

# Sleep & Why You Need it

**Sleep is without a doubt one of the most important things our bodies need. Even though it may seem like we are not doing much, the reality is that our bodies are working overtime.**

**While you sleep your body is removing toxins that you have built up throughout the day, Not to mention, this is also when your body works on repairing itself.**

**All of the constant breaking down and rebuilding that occurs while you sleep is actually where the majority of your energy comes from in the morning. That's why it is important that you get a good nights sleep.**

**Get ready to find out how to do just that!**

*Pamela  
Tremblay*

# How GUT HEALTH

## Affects Your Sleep

### LIGHT

Natural and unnatural EG sunlight, computers, TV iPhone



**BRAIN**  
Regulates circadian rhythm, hormones, serotonin, sleep cycle, and more.

**EYES**  
Contain light receptors that tell hypothalamus to increase/decrease serotonin.

Serotonin helps to produce melatonin, which the brain sleep and improves mood.

**POOR LIFESTYLE**  
Soda  
Sugar  
Stress  
Pesticides  
Antibiotics  
Poor Sleep

**GOOD LIFESTYLE**  
Good Diet  
Physical Activity  
Hydration  
8 Hours of Sleep  
Healthy Relationships

Decreases

Increases

**MICROBIOME**  
Helps to make serotonin & regulate sleep cycle

**SEROTONIN**  
Affected by brain & microbiome. Regulates mood & body clock.

Helps to Make

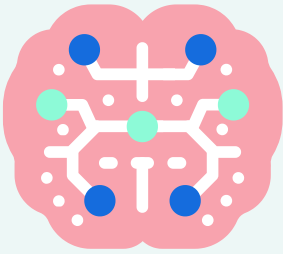
Helps to Regulate



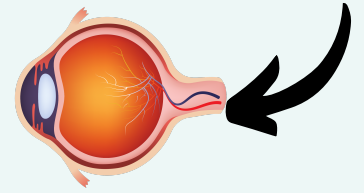
# How Exposure to **BLUE LIGHT** Affects Your Brain & Body

By Disrupting Melatonin, **Blue Light** ruins sleep schedules. This leads to all kinds of **HEALTH PROBLEMS**:

Disruption to your sleep cycle can leave you distracted and impair your **MEMORY** the next day.



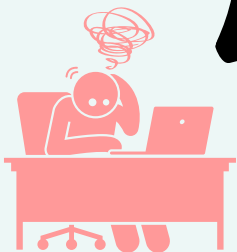
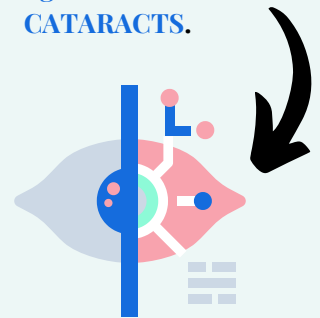
There is evidence that **Blue Light** can damage our vision by harming the **RETINA** over time.



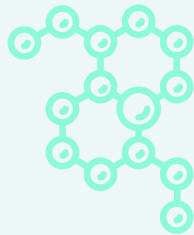
A poor night's sleep caused by **Blue Light** can make it even **HARDER TO LEARN**.



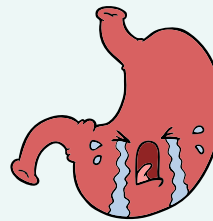
Research is being done to investigate whether or not **Blue light** can lead to **CATARACTS**.



Over the long term, not getting enough sleep can lead to **NEUROTOXIN** buildup that can make it even harder to get a good night's sleep.

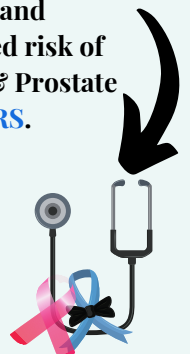


People whose Melatonin levels are suppressed due to light exposure are more prone to **DEPRESSION**.



Disrupting Melatonin and sleep can disrupt hormones that control hunger and increase risk of **OBESITY**.

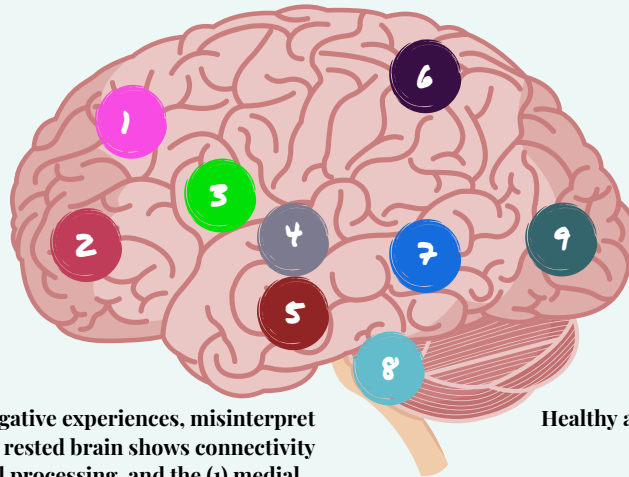
There's a connection between **Blue Light** exposure at night and increased risk of **Breast & Prostate CANCERS**.



# What Happens When You **DON'T SLEEP?**

## LOST MEMORIES

The (7) hippocampus, exhibits a distinct pattern of neural activity when the waking mind learns new information. Our brains later replay the same activity pattern while we sleep to help the information stick. Lose sleep, lose long-term memories.



## FALSE MEMORIES

A sleep deprived brain may fail to encode memories successfully. Due to altered function in the hippocampus, as well as the prefrontal cortex and parietal lobe regions. People are more likely to incorporate misinformation into memories of events observed after a night without sleep.

## ANGER

Sleep loss primes our brains to focus on negative experiences, misinterpret facial expressions and pick fights. The well rested brain shows connectivity between the amygdala, critical to emotional processing, and the (1) medial prefrontal cortex, which helps regulate feelings.

## BRAIN SHRINKAGE

Healthy adults who get poor sleep lose volume in the frontal, (11) temporal, and parietal lobes.

## IMPAIRED WIT

Sleep loss affects cognitive process like divergent thinking which helps us switch topics during conversation. Activity in the (3) inferior frontal gyrus increases when sleep deprived people tried to list uses for different objects.

## SLURRED SPEECH

The (11) temporal lobe, region associated with language processing, is highly active in well rested individuals and inactive in their exhausted and counterparts.

## HALLUCINATIONS

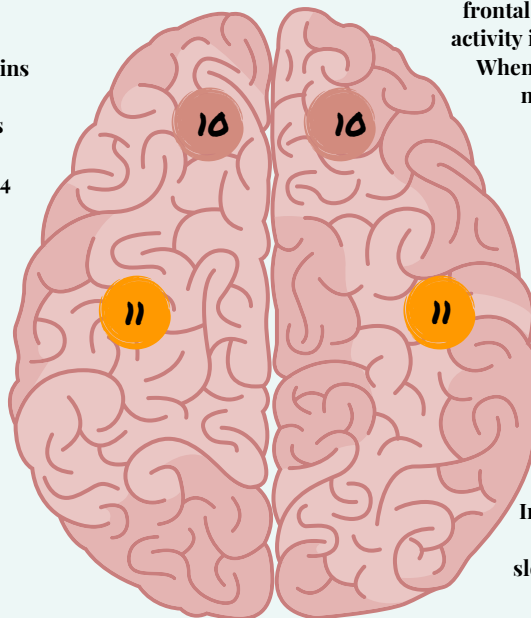
The well rested brain filters stimuli to separate what matters from what does not. When our brains are deprived of sleep they cannot filter properly which can create an overlay of information. This can produce hallucinations often referred to as ocular hallucinations that typically occur after 24 hours without sleep.

## CRAVE SWEETS + HIGH CALORIES

Sleep loss corresponds with decreased activity in the (10) frontal lobe, which controls decision-making, and more activity in the (5) amygdala, a key player in fear detection. When combined dulls judgement and increases desire, not to mention the hormonal imbalance caused by increased Cortisol levels.

## BRAIN FOG

After a good night's rest, attention lapses correspond to altered thalamus function and less active frontal and parietal networks. This is why we tend to tune out when we are bored. When you are sleep deprived you are more likely to transition into this activity and also experience impaired visual sensory. Simply put sleep loss turns you into Phoebe from Friends.



## RISKY BUSINESS

When sleep deprived people prepare to make decisions the brain's reward center in the (2) prefrontal cortex lights up, suggesting they expect to win. But when they don't win the brain activity decreases in the (4) anterior insula, punishment and aversion. This means they are less likely to care if they lose.

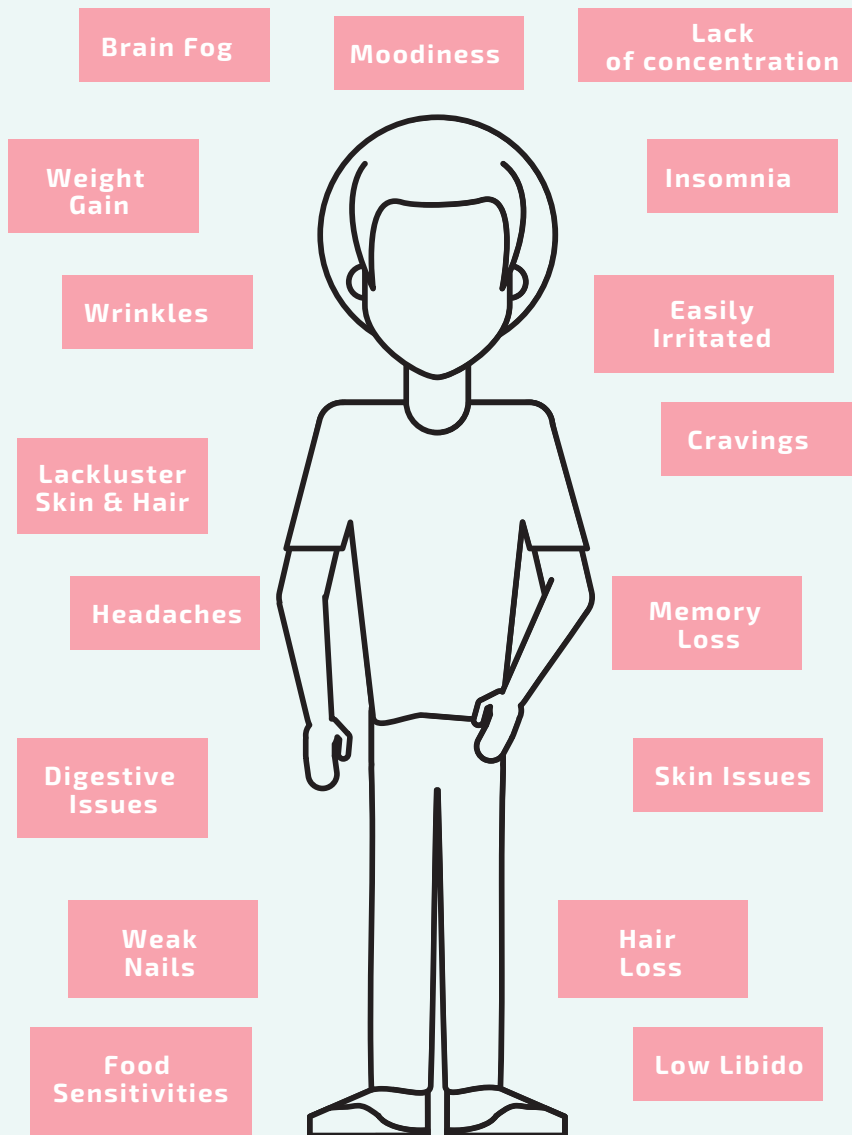
## BRAIN DAMAGE

In the (8) brain stem the damage from all nighters may be irreparable, making "catching up on lost sleep" a poor excuse for sleeping until noon on the weekends.

# Is Your Body Trying to Tell You Something?

## LISTEN UP

Our bodies have a story to tell. They are constantly trying to get their needs across. Unfortunately, most of us don't speak the language. Here are some Key signs to watch out for that let you know you NEED to SLEEP!



## WHAT IS YOUR BODY TELLING YOU?

If you are suffering from any of these signs or symptoms you owe it to yourself to improve your sleep today. Just remember not all solutions are built the same. When choosing an option for you, make sure it is something gentle and all natural.

# Your Body After One Night Of *TOO-LITTLE SLEEP*

## *EYES*

Your eyes are bloodshot, your eyelids appear droopy, and you have dark circles under your eyes.

## *IMMUNE SYSTEM*

Your body has a harder time mounting a response to fight off an infection.

## *MOOD*

Because your body is now working overtime to try and make up for the sleep loss your cortisol levels increase forcing your body to remain on high alert. In doing so your mood becomes irritable and fluctuates piratically throughout the day.



## *BRAIN*

You have a harder time making decisions, concentrating, and remembering things, along with a slowed reaction time.

## *SKIN*

Fine lines and wrinkles are more noticeable.

## *APPETITE*

Your metabolism slows down and your appetite goes up, causing you to consume extra calories you don't need.

**All this & more can occur when you get less than 6 hours of sleep a night.**



### UNPLUG

Turn off all electronics at least 30 minutes prior to sleep.



### MEDITATION

5 minutes a day for 30 days is enough to help re-wire your brain to handle stress better!



### GRATITUDE JOURNAL

Write 3 things a day for 30 days is enough to help re-wire your brain to handle stress better!

# Tips To Reduce Stress & Help You Sleep



### SPA NIGHT

Schedule your breaks in **FIRST!** It will help you get work done faster.



### EXERCISE OR STRETCH

Improves circulation and reduces any built up tension you may be holding.

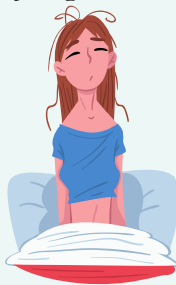
### TAKE A HOT BATH

Enjoying a hot bath 1 hour prior to sleep can help reduce tension in the body.



### GO TO BED EARLY

If you stay up past 10 pm your body gets a second wind. Make sure you go to be by 10!



### CREATE A ROUTINE

Help your body reset it's clock by sticking to a routine for 30 days then it will take over.





*Want* to know more?

**I hope this weeks focus has helped you not only see just how important sleep is for your health. But also helped you get a better quality or quantity of sleep.**

**Remember at the end of the day it is all about being consistent in everything you do and having a number of ways to support your body and mind.**

**Get ready for even more skills and tools to help you improve your brain health!**

*Pamela  
Tremblay*