



Let's Chat About Thinking:

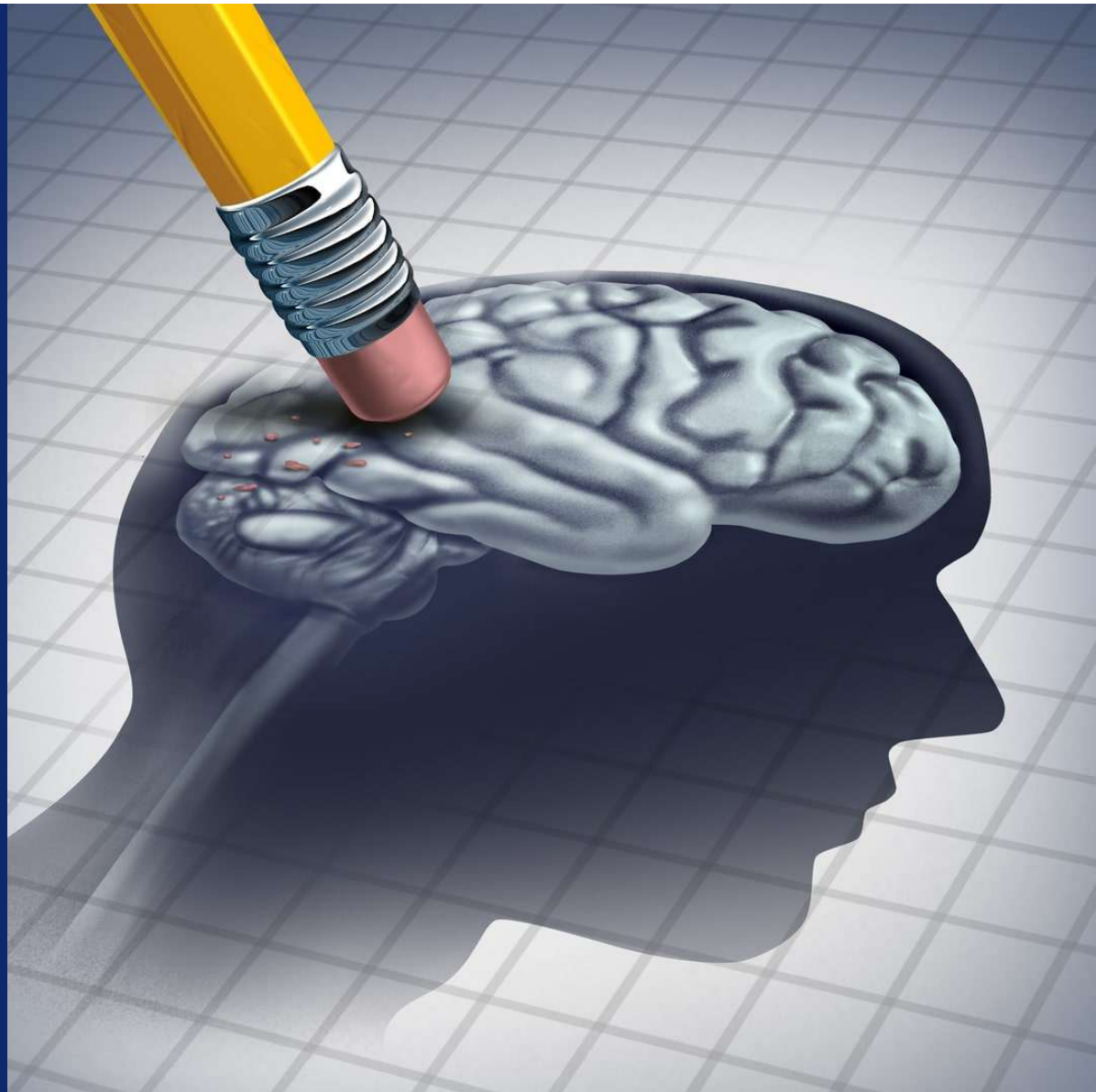
How the Brain Works in Sleep

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**Getting
restorative sleep
is one of the
pillars of brain
health, but why?**



SLEEP IS LIKE A BRAIN WASH

Cerebrospinal fluid is circulated

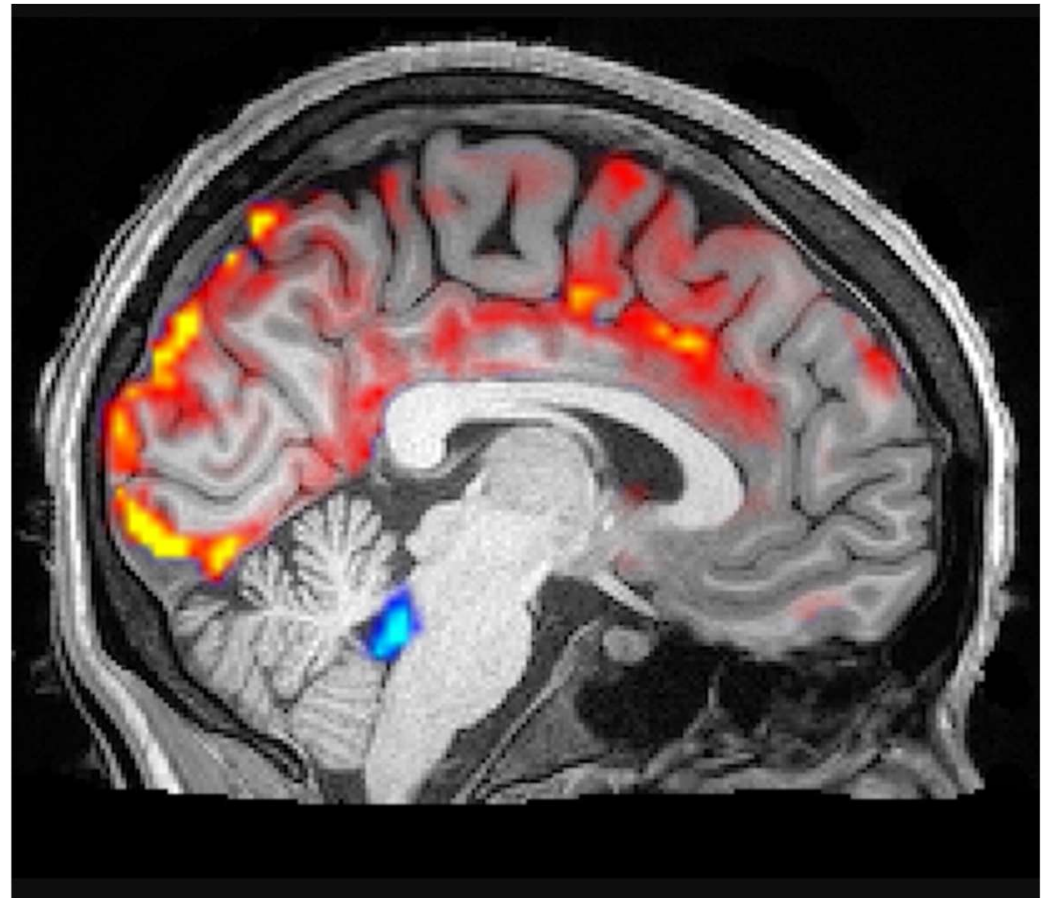
Consolidating new ideas

Reorganizing and reprioritizing

Regulates metabolism

Removal of toxins (cell waste)

*There should be limited
engagement with the external
world (state of
unconsciousness), which gives
the brain time to clean up.*

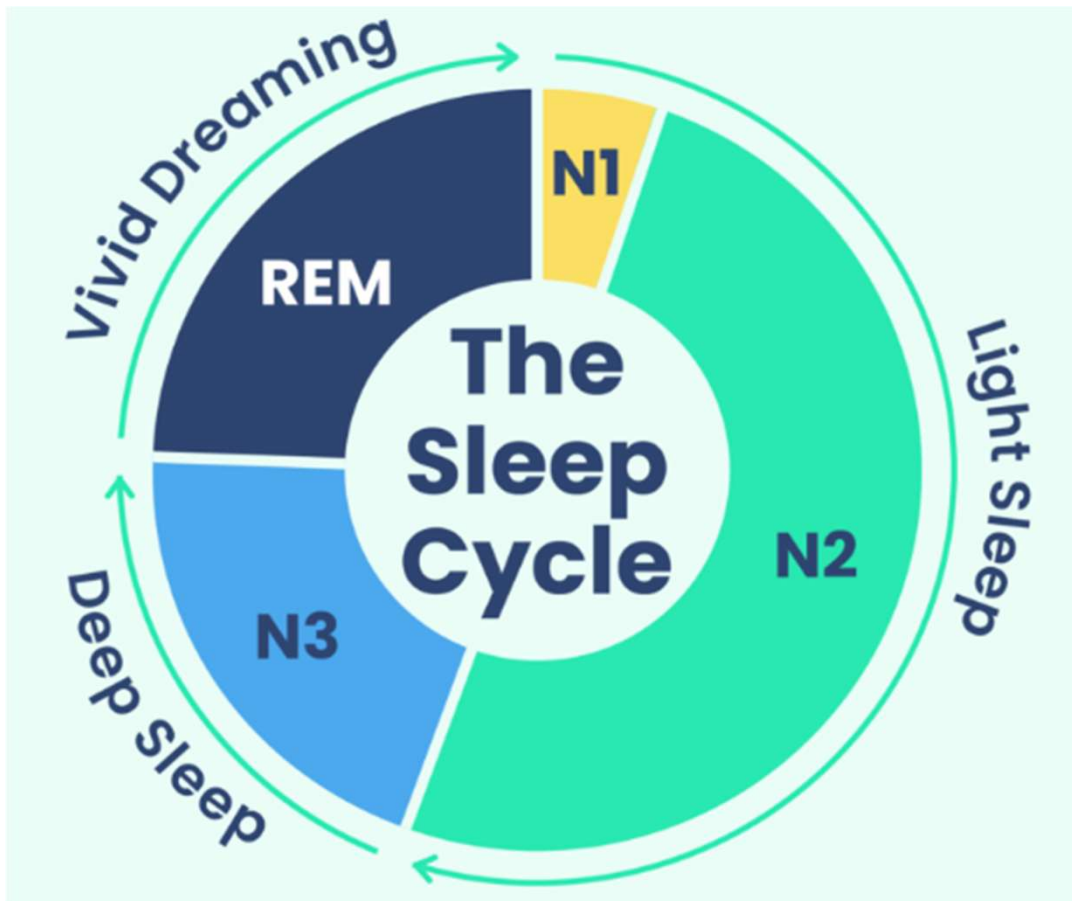


SLEEP DEPRIVATION IS LIKE A RUN DOWN BUSINESS

Adults need 7-9 hours of sleep to do those functions. If not, we can have inefficiency in cognitive processing:

- *Slurred speech*
- *Forgetfulness*
- *Learning is more difficult*
- *Emotional reactivity*
- *Motor response times are slowed*
- *Decision making is harder*





NON-REM SLEEP

Stage ONE: Drowsy, occasional twitches, lasts a few minutes. This is the engine shutting off.

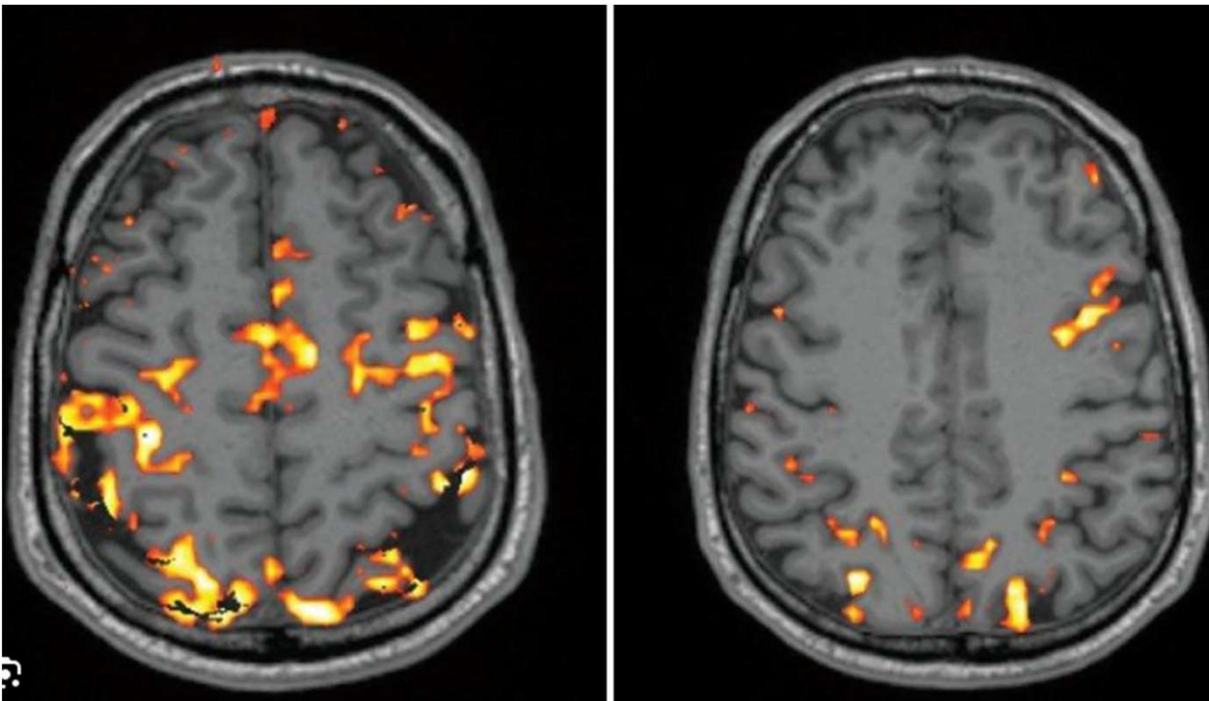
Stage TWO: Light sleep, muscles relax, brain has sporadic bursts of activity. Majority of the night.

Stage THREE: Deep sleep, brain waves are even slower, your heart rate and breathing are slowed.

REM SLEEP

Mixed frequency of brain waves, very active, breathing, HR, blood pressure go up again. Dreaming, but muscles should be atonic.

Brain diseases can disrupt sleep functions



Insomnia

Interrupted circadian rhythms, day/night cycles (wandering at night)

Poor sleep quality

Sleepy during the day

REMSD: acting out dreams, yelling/talking in sleep

How To Get a Good Night's Sleep:

- 1. Go to bed and wake up at the same time**
If you can't fall asleep, do something else
Don't associate bed with sleeplessness (or work)
- 2. Limit exciting activities right before bed**
Exercise no sooner than 3 hours before bed
No scary TV shows, news, arguments
No caffeine or alcohol before bed
- 3. Make the brain feel safe to shut off**
Warm bath, turn off lights and sounds
No phones or screens within 1 hour

**Also make sure to evaluate
for sleep apnea!**

- Snoring
- Not feeling rested on wake up

Sleep Apnea is the brain choking at night! There are many treatments for this.

How To Get a Good Night's Sleep:

1. Melatonin is a great over the counter sleep aide

*Start at 3mg and increase up to 10mg as needed
Take at the same time every night, create a routine
Natural, non-habit forming*

2. Magnesium salts are another great vitamin

*Magnesium citrate can worsen diarrhea
Magnesium bisglycinate, threonate, oxide all good options
No specific dose, usually around 200 – 400mg nightly*

3. Avoid cognitotoxic medications and sleep aides

*Benadryl, Tylenol PM and other anti-histamines do not help long-term
Xanax, Ativan, and other anxiety pills do not help long-term
Talk to a sleep specialist or PCP about safe sleep aides*