

# Get The Best Night's Sleep (Especially In These Times)

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[www.drmarcmilstein.com](http://www.drmarcmilstein.com)

# Morning Person? Genetics?

Vallat, R., Berry, S.E., Tsereteli, N. *et al.* How people wake up is associated with previous night's sleep together with physical activity and food intake. *Nat Commun* **13**, 7116 (2022). <https://doi.org/10.1038/s41467-022-34503-2>

# Morning Person? Genetics?

- 1) get substantial exercise the day before
- 2) sleep longer and later than you typically do
- 3) eat a low sugar breakfast rich in complex carbohydrates, with a moderate amount of protein
- 4) pay attention to your body's glucose response after eating.

How Are You  
Sleeping?



Or Like This?



Risk Factors For???

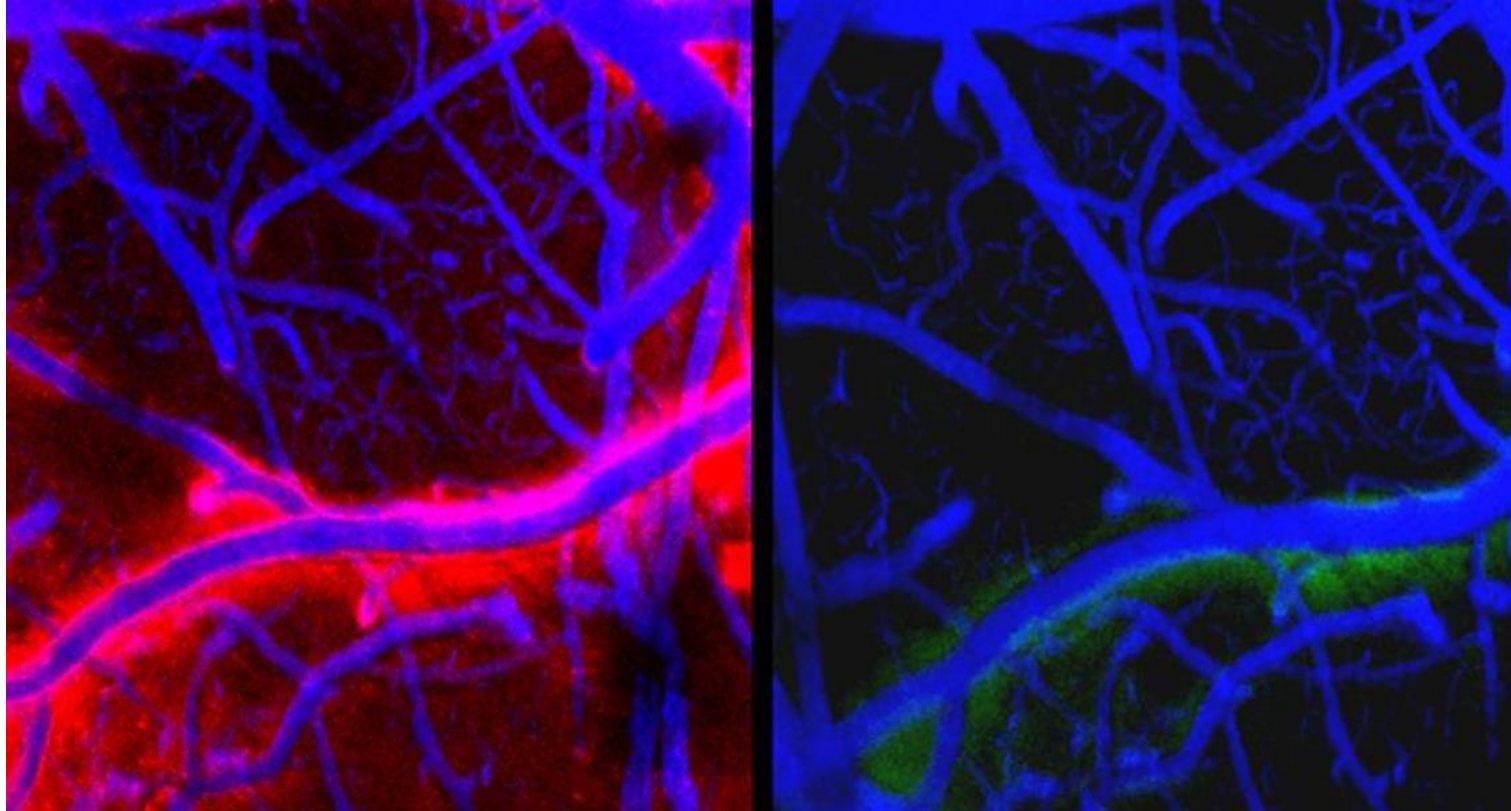
## Seriousness Of Sleep

- Diabetes
- Depression
- Heart disease
- Hypertension and obesity
- Cancer
- Dementia

# Take Out The Garbage?



# Brain Wash!



While you are sleeping your brain shrinks by 60% and squeezes toxins out of your brain cells and gets a wash!

**Sleep Drives Metabolite Clearance from the Adult Brain**

[Lulu Xie](#)<sup>1</sup> et al. Science 18 October 2013: Vol. 342 no. 6156 pp. 373-377



# Over The Counter Sleep Aids



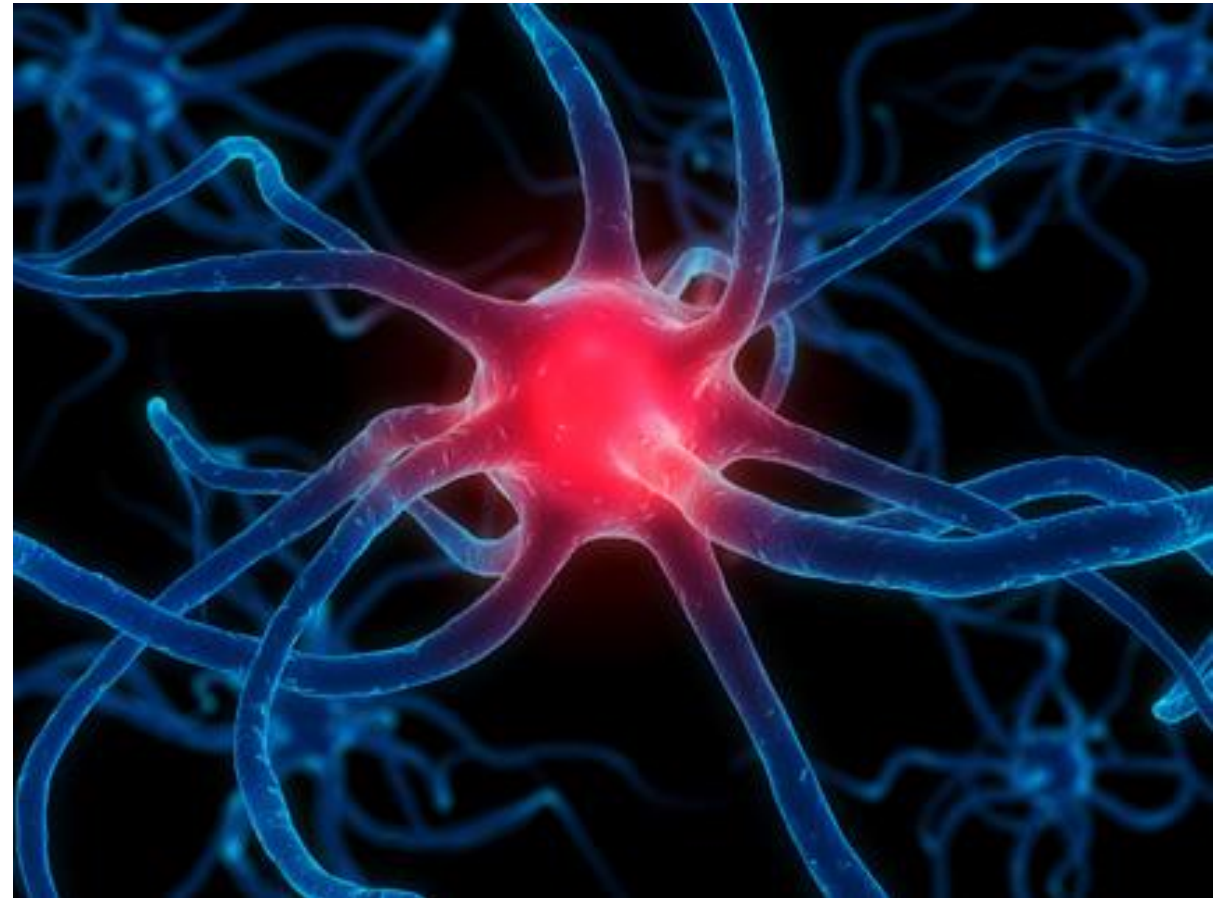
# Do Not Feel Bad

- Nearly 60 percent of adults report having sleep problems
- Americans filled 60 million prescriptions for sleeping pills last year



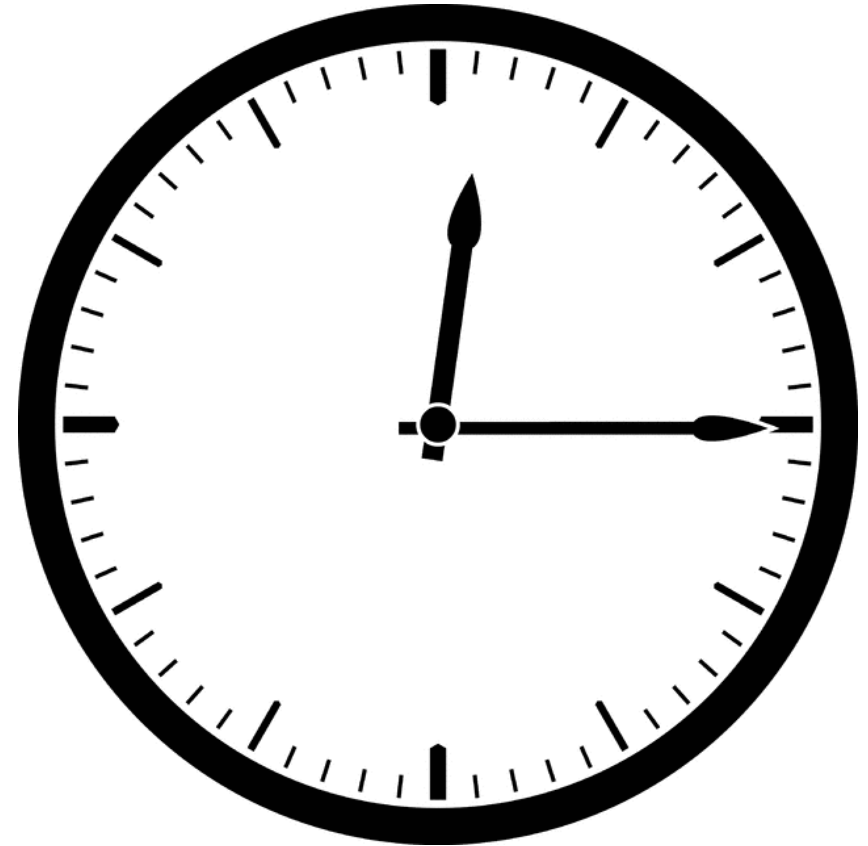
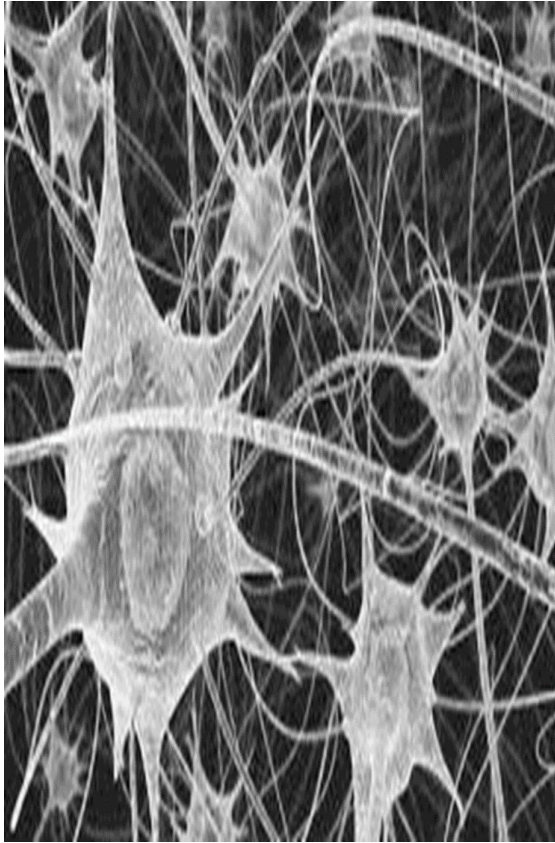
[Source: National Sleep Foundation]

# The Secret Is In Your Brain

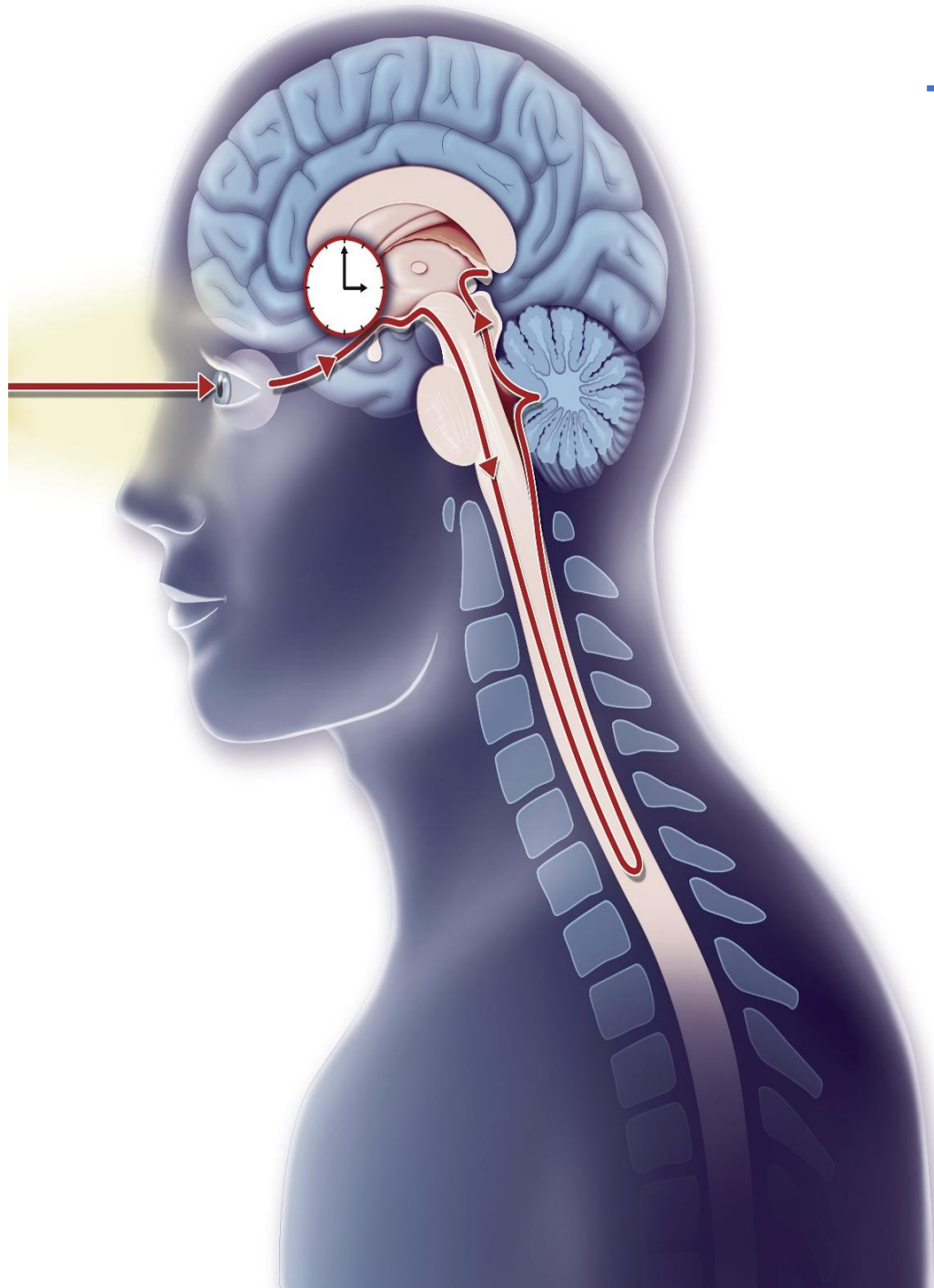


# Your Clock?

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Circadian Clock/Rhythm



## To Fall Asleep

Darkness



Eyes Sense



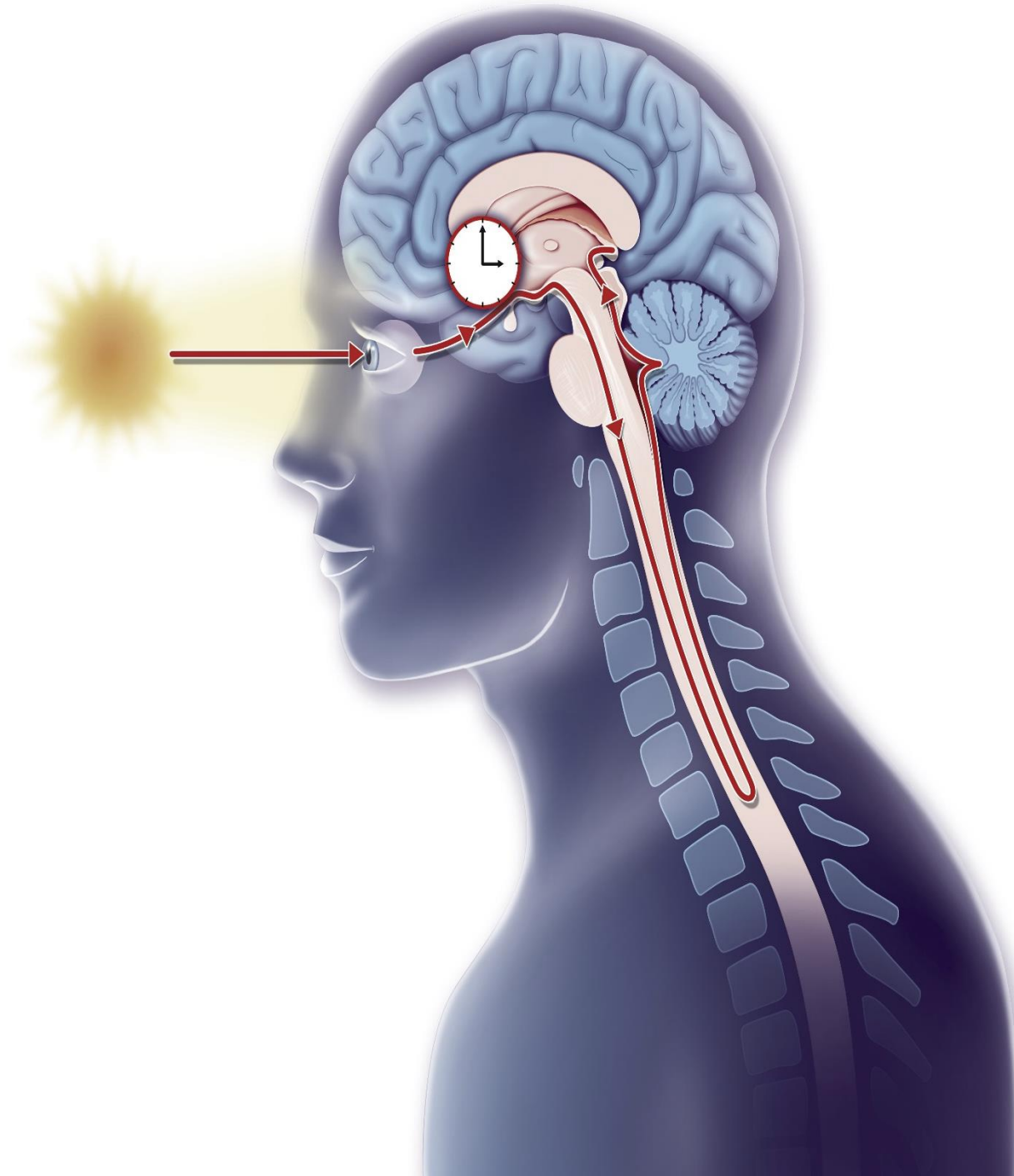
Clock



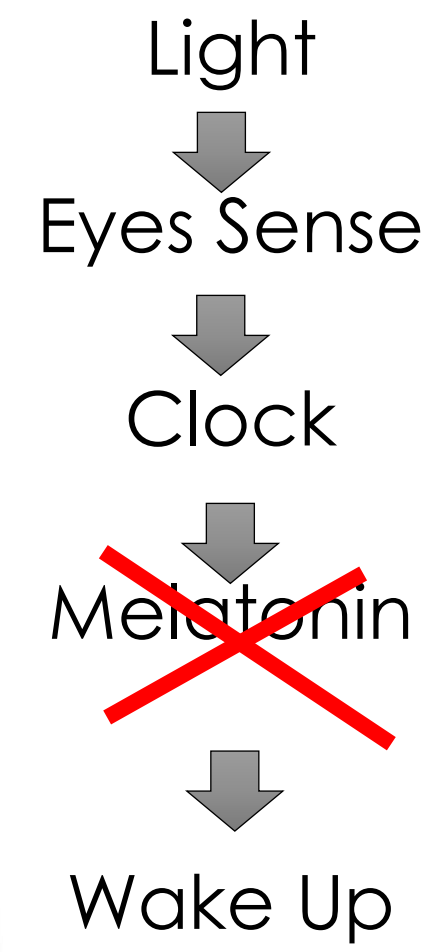
Melatonin



Sleep



# To Wake Up



# Clock Reset?

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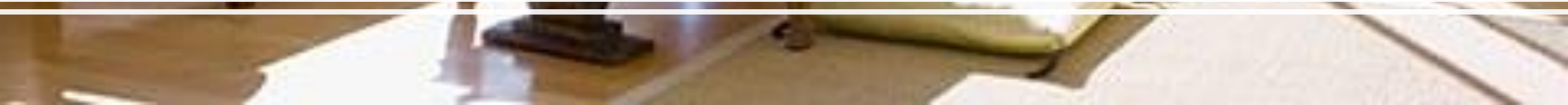
Every Morning

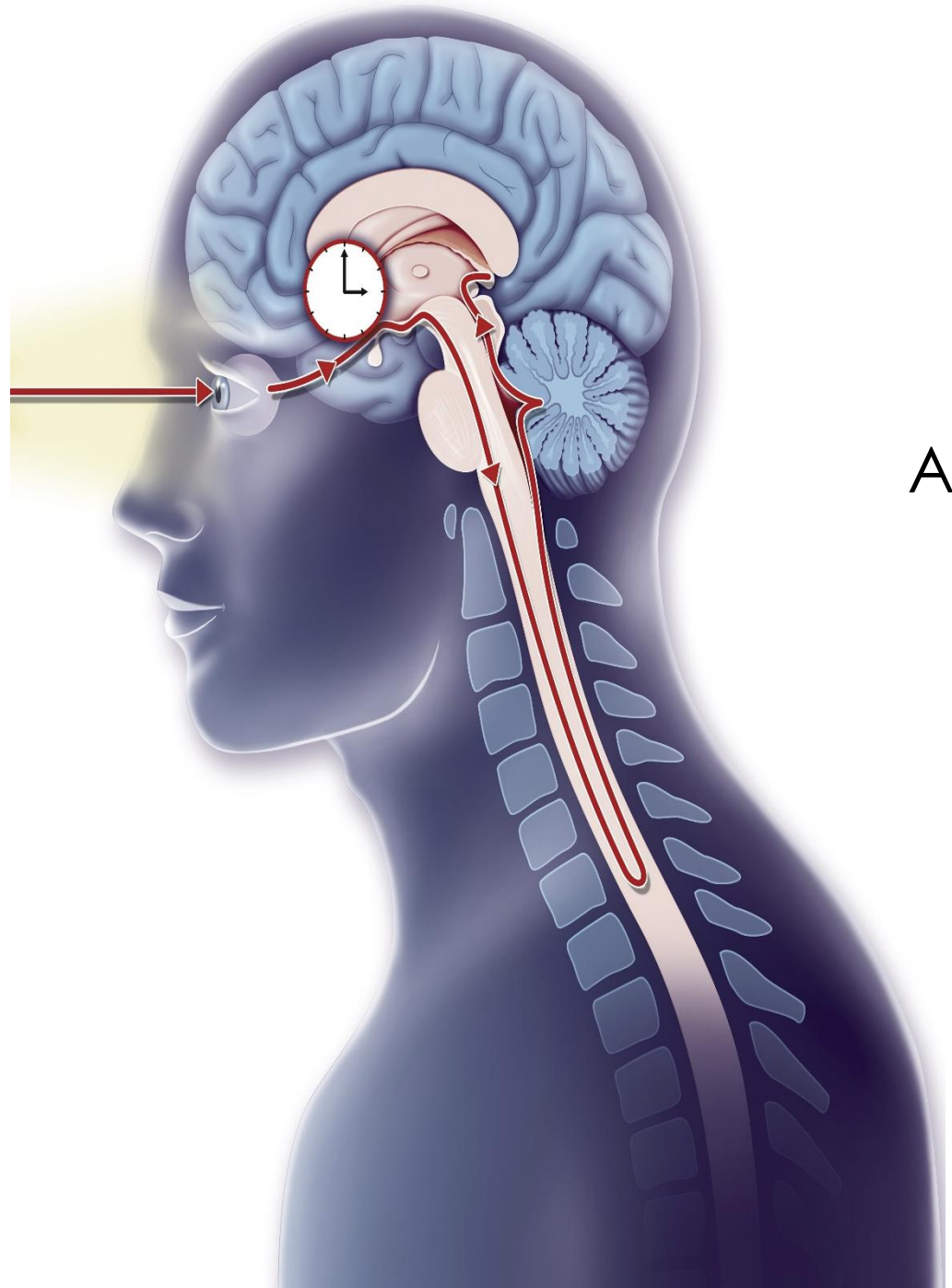






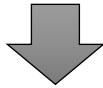
When Home During The Day:





# Length of Process

Darkness



Activates Eyes



Clock



Melatonin



Sleep

If You are  
Doing This



Does It Matter If  
Your Brain Clock  
Goes Out Of Sync?



# Daylights Savings Does It Matter?



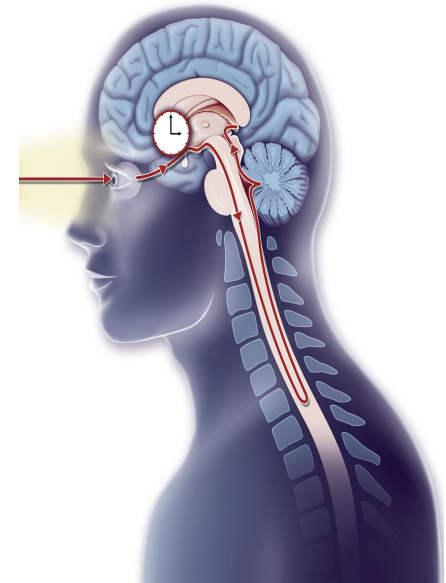
- More frequent traffic accidents and workplace injuries when we spring forward and lose an hour of sleep.
- Heart issues? Stroke?
- Judge rulings?



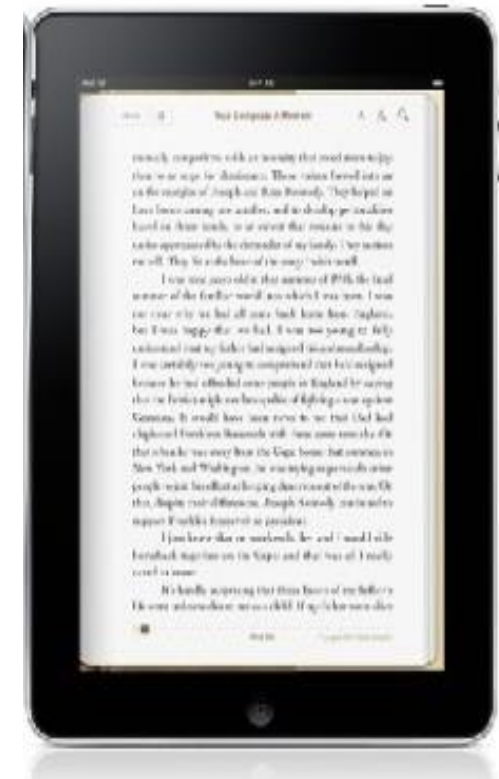
## The Master Clock

# Schedule those Zeitgebers :

- Set a wake-up time.
- Morning walk.
- Shower and get dressed even if not leaving the house.
- Eat meals at the same time.
- Block off consistent time to exercise and work.
- **Bedtime:** Pick a time to turn off lights and go to bed.
- Don't have to do all of these but just experiment with some....



# E-Readers vs. Books?





# The Blue Light

Darkness



Activates Brain Clock



~~Melatonin~~



~~Sleep~~





# Do You Sleep In The Dark?

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Pete  
Sampras





Simple  
Solution

Night Lights?



# Resetting The Brain Clock?



Go  
Camping?



Not Glamping





Sleep is NOT  
Just Rest!

# The Sleep Cycle Is

Entire Cycle takes  
about 90 minutes

Light Sleep

Deep Sleep

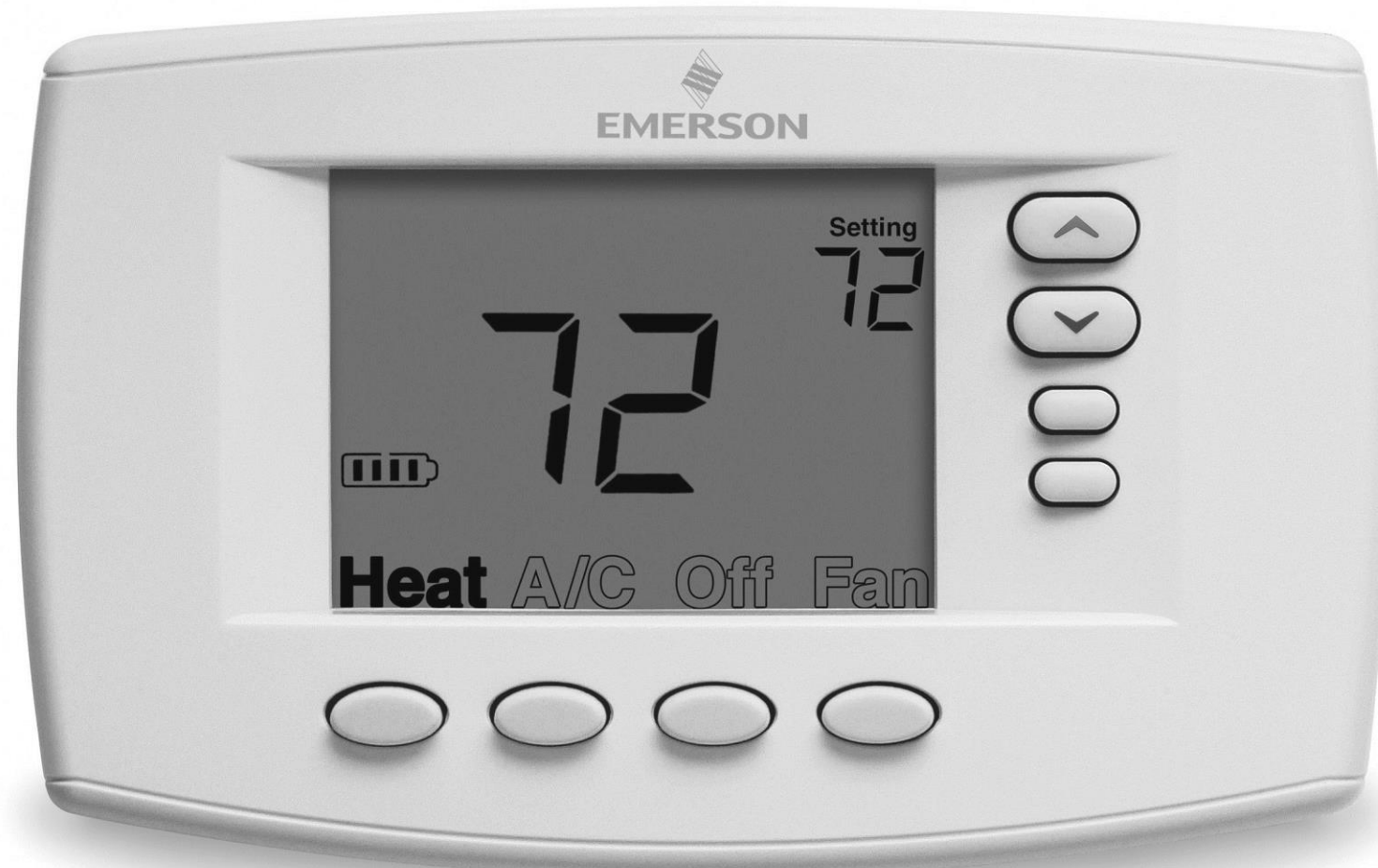
REM Sleep (Dream)

Repeat

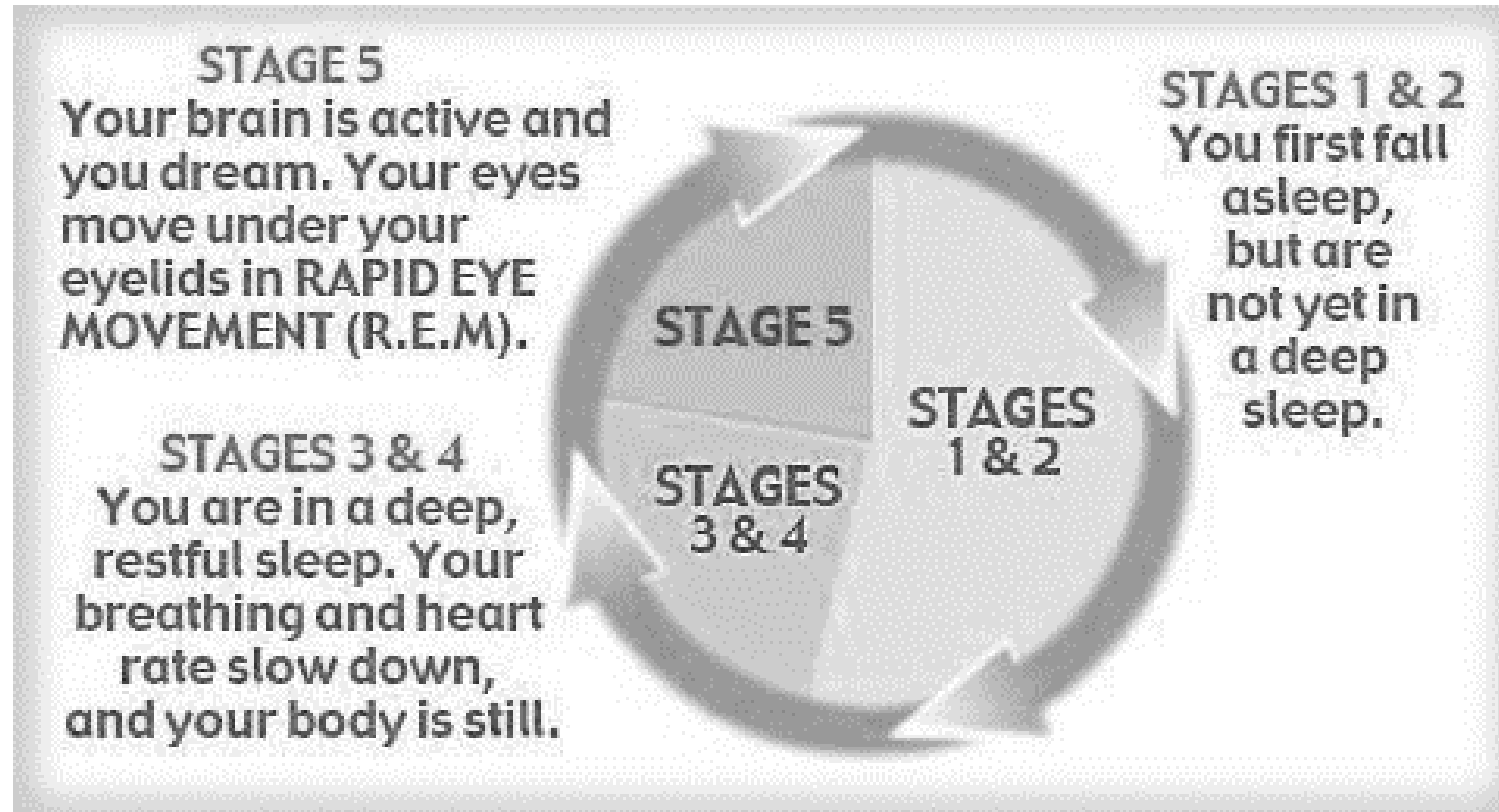
You First Enter Light Sleep

Lasts About 20 to 30 Minutes

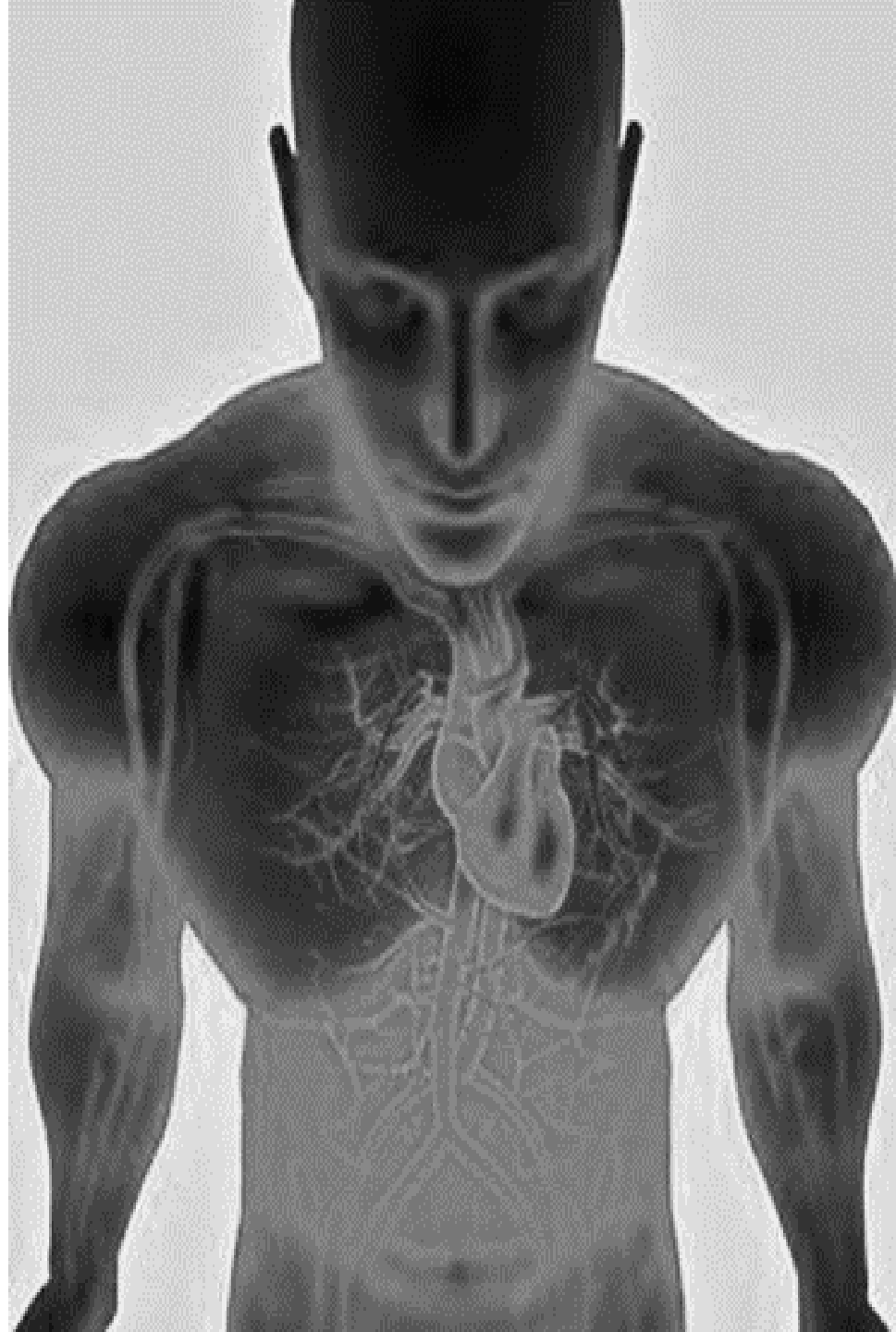
# Is It Easier To Fall Asleep In A Cooler Room Or A Warmer Room? What else?



# Deep Sleep



Have You Ever Been Woken Up And You Don't Know Where You Are?



## What Is Happening In Deep Sleep?

- Immune System Repair
- Blood Supply to Muscles Increases
- Tissue Growth and Repair Occurs
- Energy is Restored
- Hormones are Released, such as: Growth hormone

Deep Sleep Is  
Beauty  
Sleep





REM Sleep  
and Dreaming



REM  
Signaling:  
Turn Brain  
On,  
Turn Body  
Off

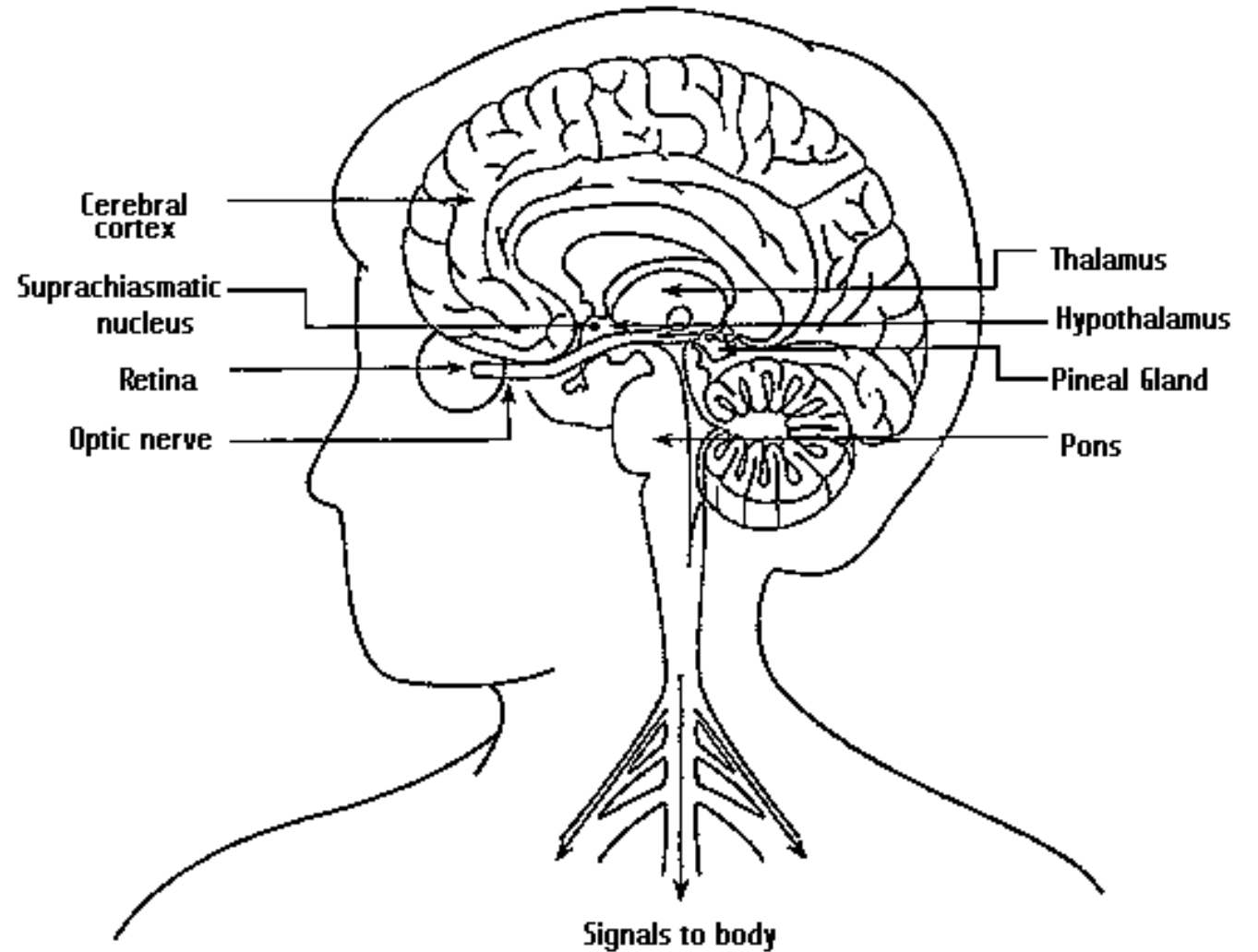


Figure 2

What Happens If You Aren't  
Paralyzed During REM State?

You Act Out  
Your Dreams:  
REM Sleep  
Behavior  
Disorder



Important Point:

You Return to  
Light Sleep  
Throughout The Night

What Does this Mean?



Sleep Tip:  
Sleep  
Anxiety Over  
A Normal  
Process

# The Sleep Cycle Is

Entire Cycle takes  
about 90 minutes

Light Sleep

Deep Sleep

REM Sleep (Dream)

Repeat

To Nap Or  
Not To Nap?



# Napping

Less Than 30 Minutes Or  
a Full 90 Minutes Is Best  
WHY?

- LIGHT SLEEP
- DEEP SLEEP
- REM SLEEP (DREAM)
- REPEAT



# 60% Of Sleep Problems Are Stress Related



SLEEP TIP  
Your Brain Is  
A  
Pattern  
Machine



# Practical Before Bed Tips

- Light stretching
- Boring reading
- Soft relaxing music
- Breathing exercises
- Mindfulness exercises
- Sleep diary

Bad Idea





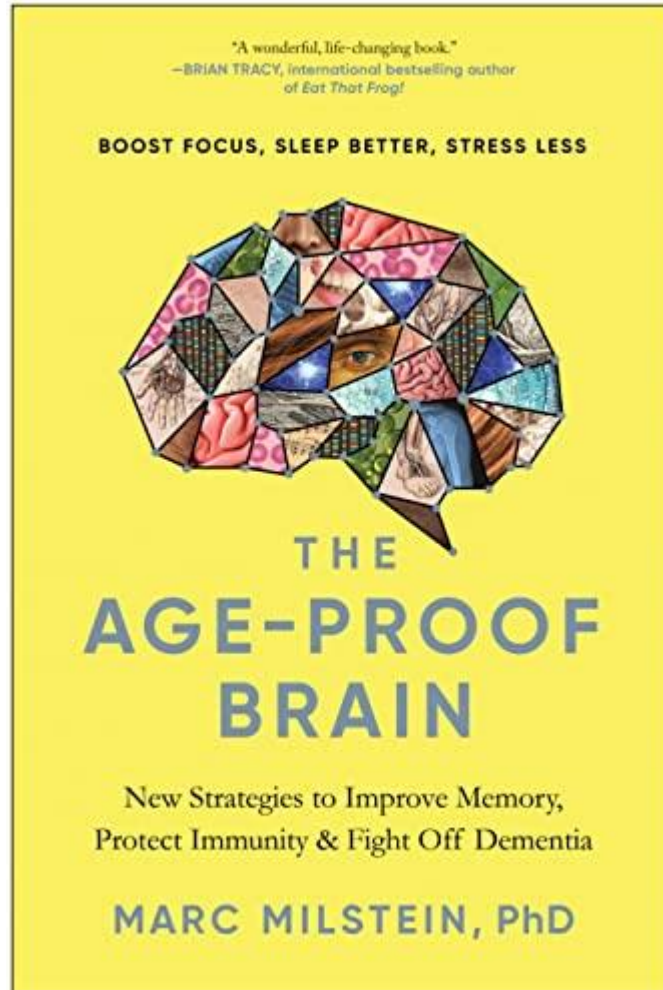
Should You  
Lie In  
Bed When  
You  
Can't Sleep?

Thanks and wishing you a  
healthy week with great  
sleep....

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# Questions:

- Melatonin?
- Alcohol?
- Food?
- Exercise?
- Caffeine?
- How much sleep?
- Sound?
- Sleep Trackers?



@drmarcmilstein