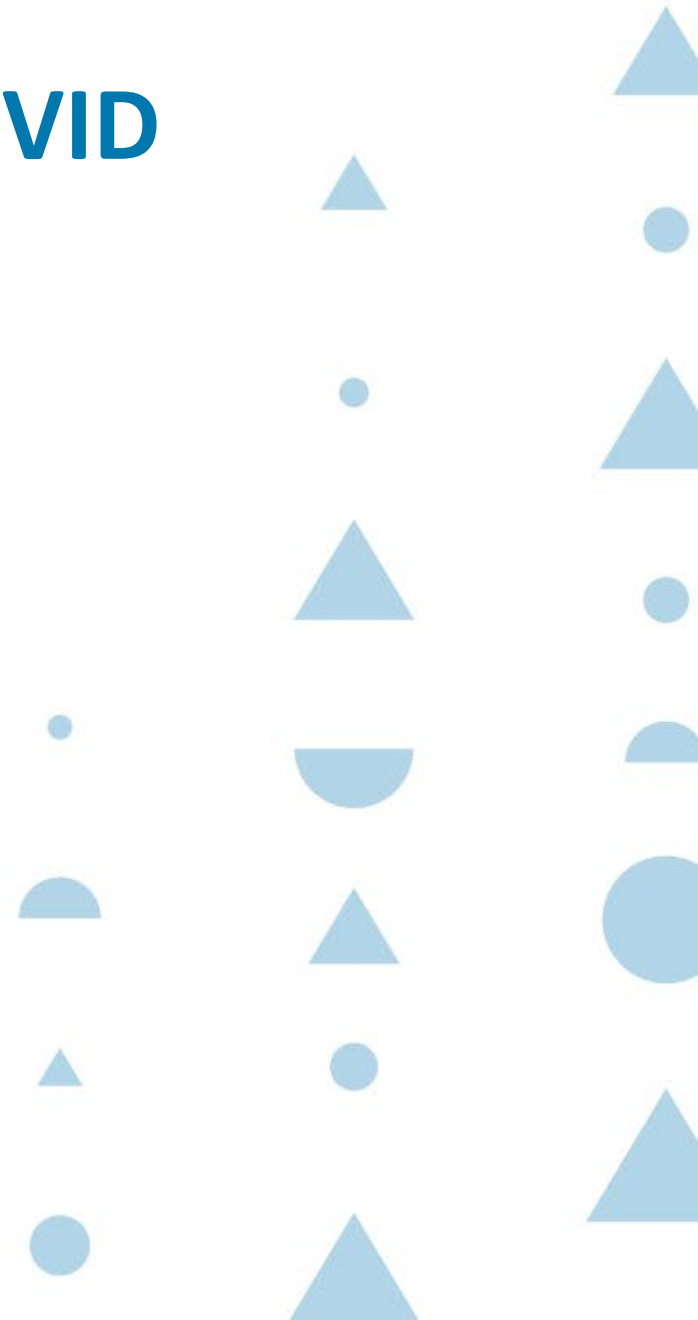


# VCH Safety Summit: Reflections on COVID

2021 JOHSC conference

September 15, 2021

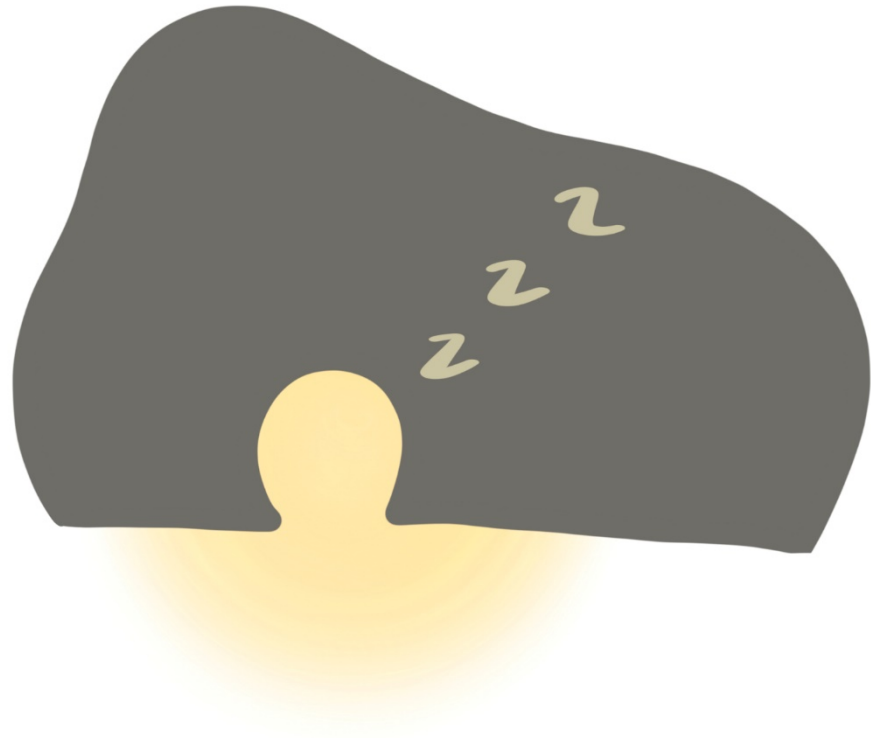
Virtual experience



Why do we sleep?

# Why do we sleep?

Inactivity Theory



Siegel, 2011

# Why do we sleep?



## Energy Conservation Theory

Horne, 1977

# Why do we sleep?

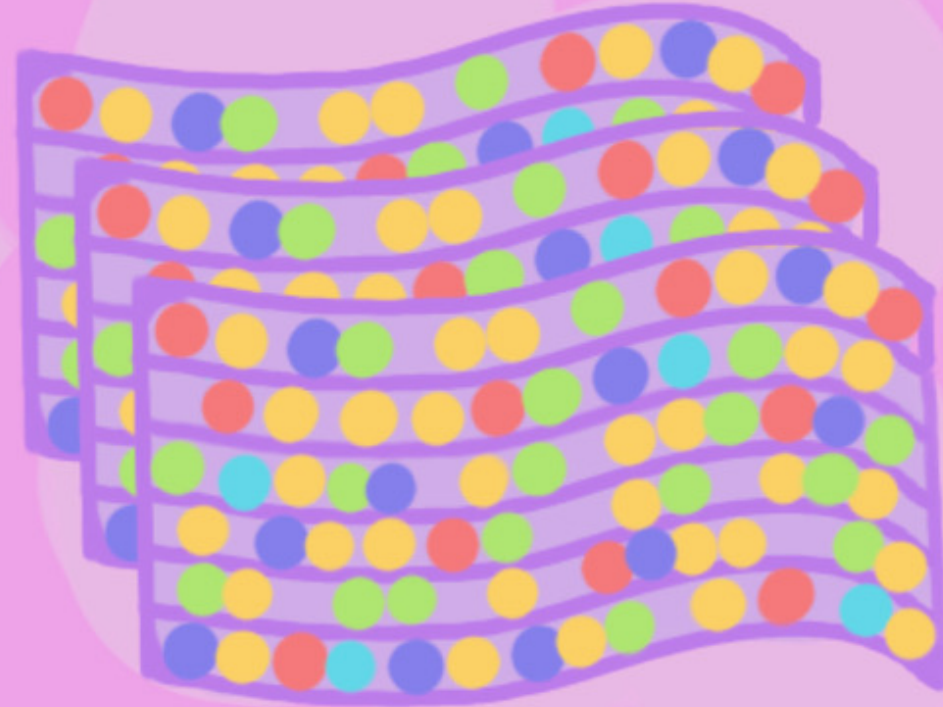


Replenishing brain  
glycogen levels

Mergenthaler et al., 2013

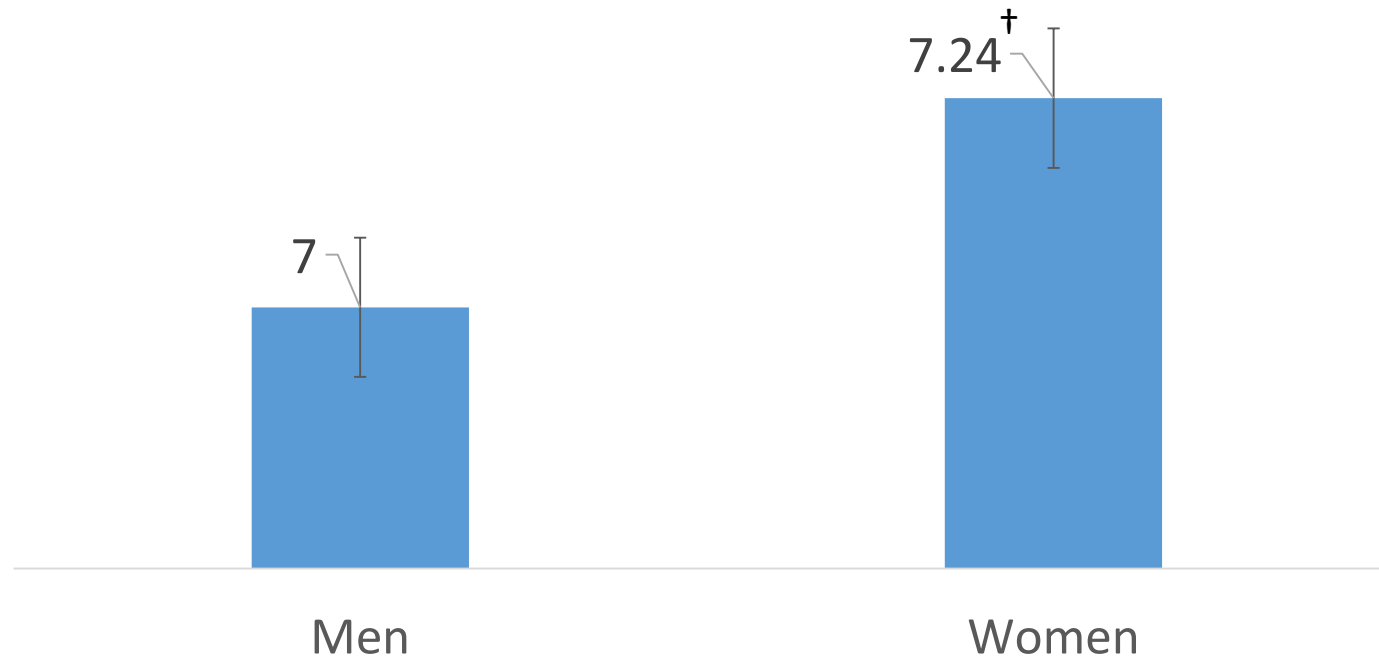
# Why do we sleep?

## Brain Plasticity Theory



Frank, 2001  
Kurdziel, 2019

# How many hours do Canadians sleep each night?



**Figure 1.** Mean hours of sleep per night for Canadians aged 18-64 from 2007-2013 (<sup>†</sup> $p < 0.05$ )

50%

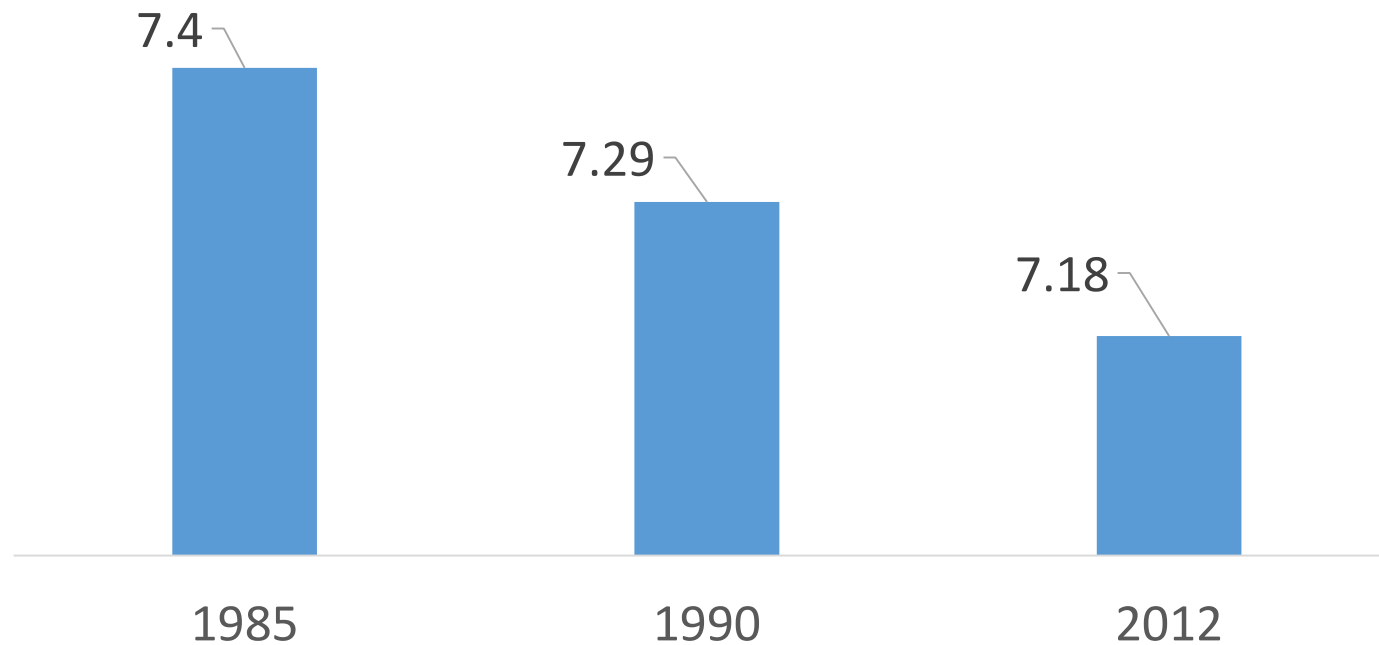
Have trouble  
falling/staying asleep

44%

Don't find their sleep  
refreshing

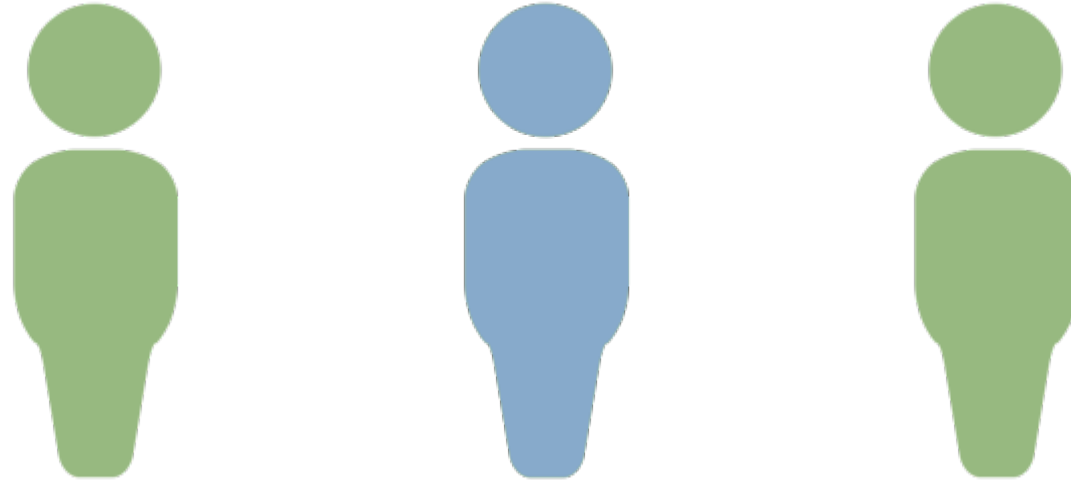


# We have been losing sleep



**Figure 2.** Mean hours of sleep per night for US adults aged  $\geq 18$ y in 1985, 1990, and 2012 ( $p$  2012 versus 1985  $< 0.001$ )

# We have been losing sleep



< 6 hours

What happens if we don't  
sleep enough?

Short Term



Increased stress responsivity

Mood disorders

Cognitive, memory, and performance deficits

Sleepiness

# What happens if we don't sleep enough?

Long Term



Hypertension (high blood pressure)  
Cardiovascular disease  
Weight related issues  
Type 2 diabetes  
Colorectal cancer

[Occup Environ Med](#). 2000 Oct; 57(10): 649–655.

doi: [10.1136/oem.57.10.649](https://doi.org/10.1136/oem.57.10.649)

PMCID: PMC1739867

PMID: [10984335](https://pubmed.ncbi.nlm.nih.gov/10984335/)

## **Moderate sleep deprivation produces impairments in cognitive and motor performance equivalent to legally prescribed levels of alcohol intoxication**

[A Williamson](#) and [A. Feyer](#)



# Sleep Deprivation vs Cognitive & Motor Performance



0.05%

BAC

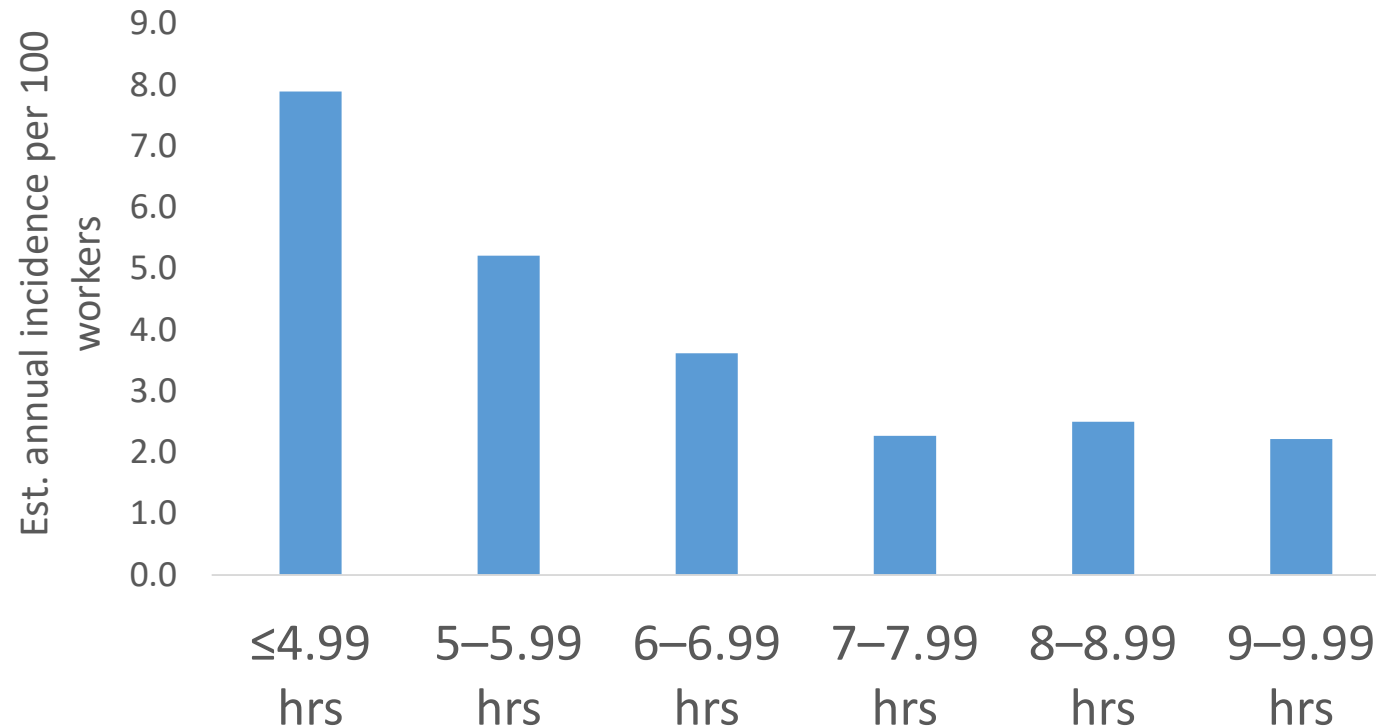
Being awake for over  
17 hours

0.10%

BAC

Being awake for over  
24 hours

# More injuries at work



**Figure 3.** Estimated annual injury incidence per 100 workers by usual daily sleep duration

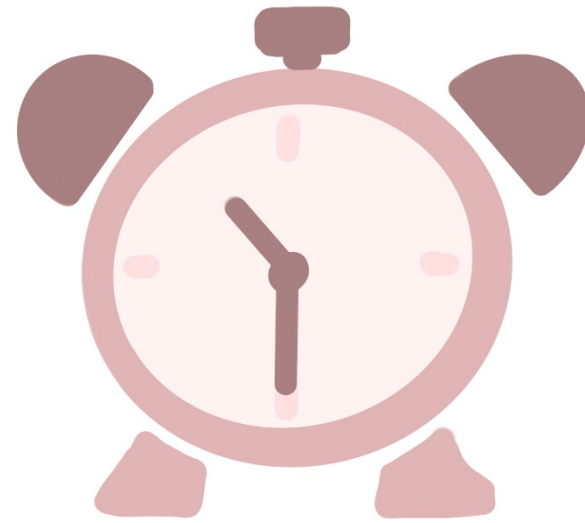
How can we get more higher quality sleep?



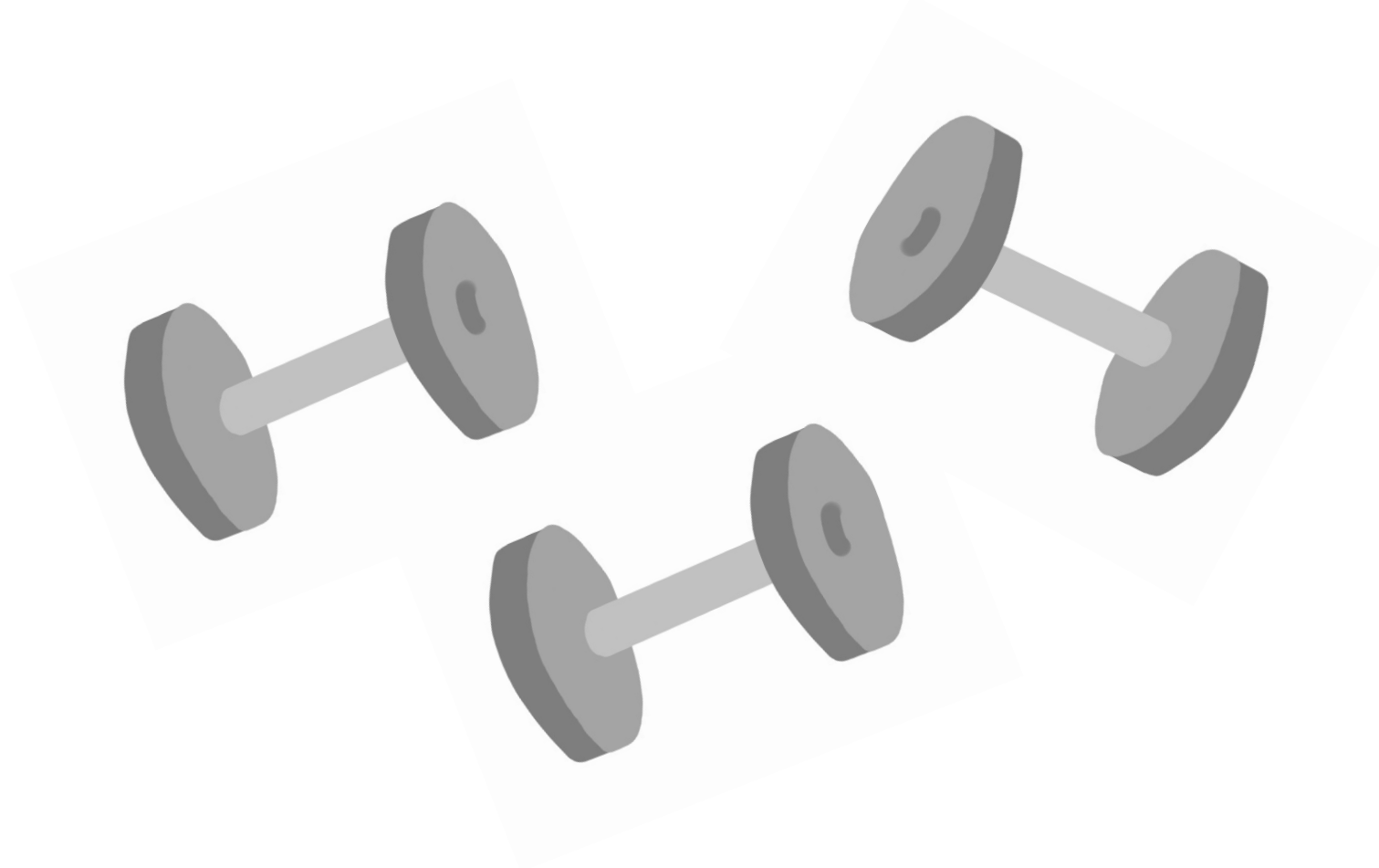
# Decrease screen time before bed



Try to go to sleep at the  
same time each night



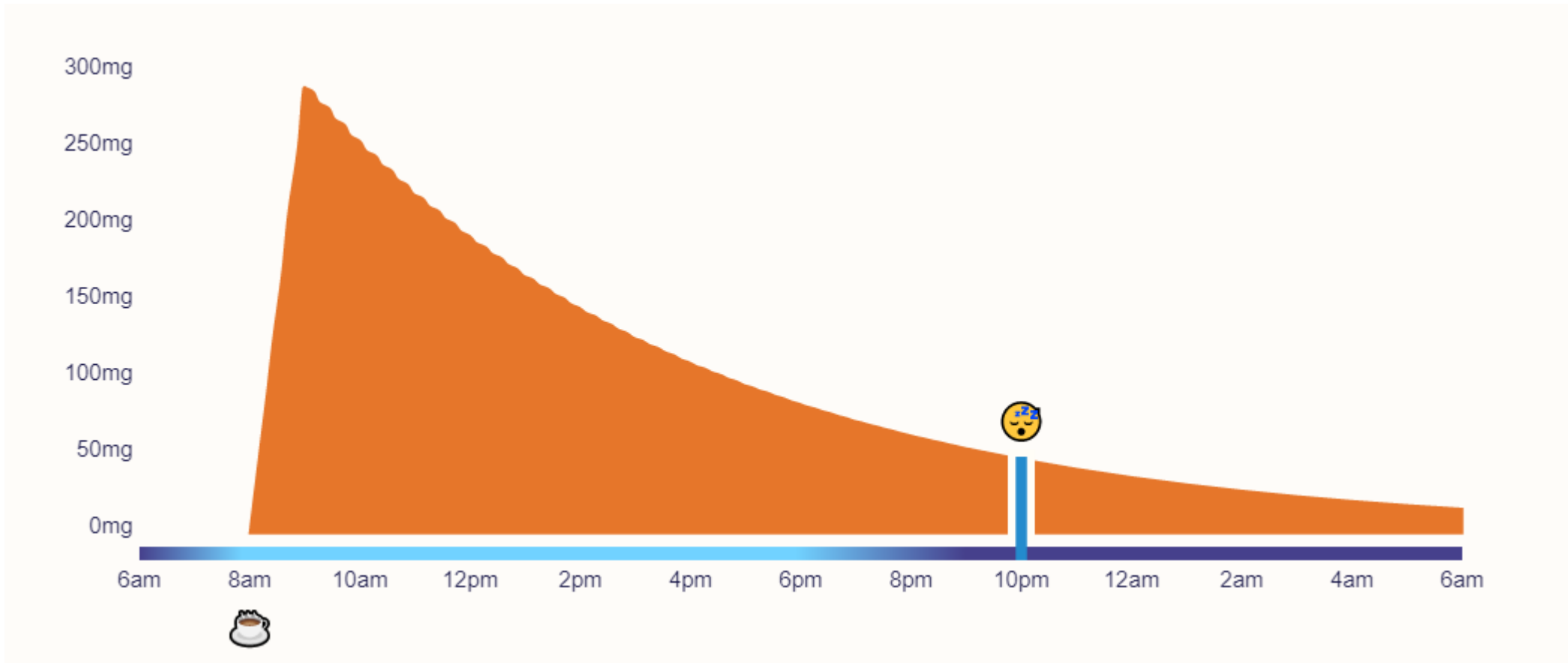
# Exercise regularly



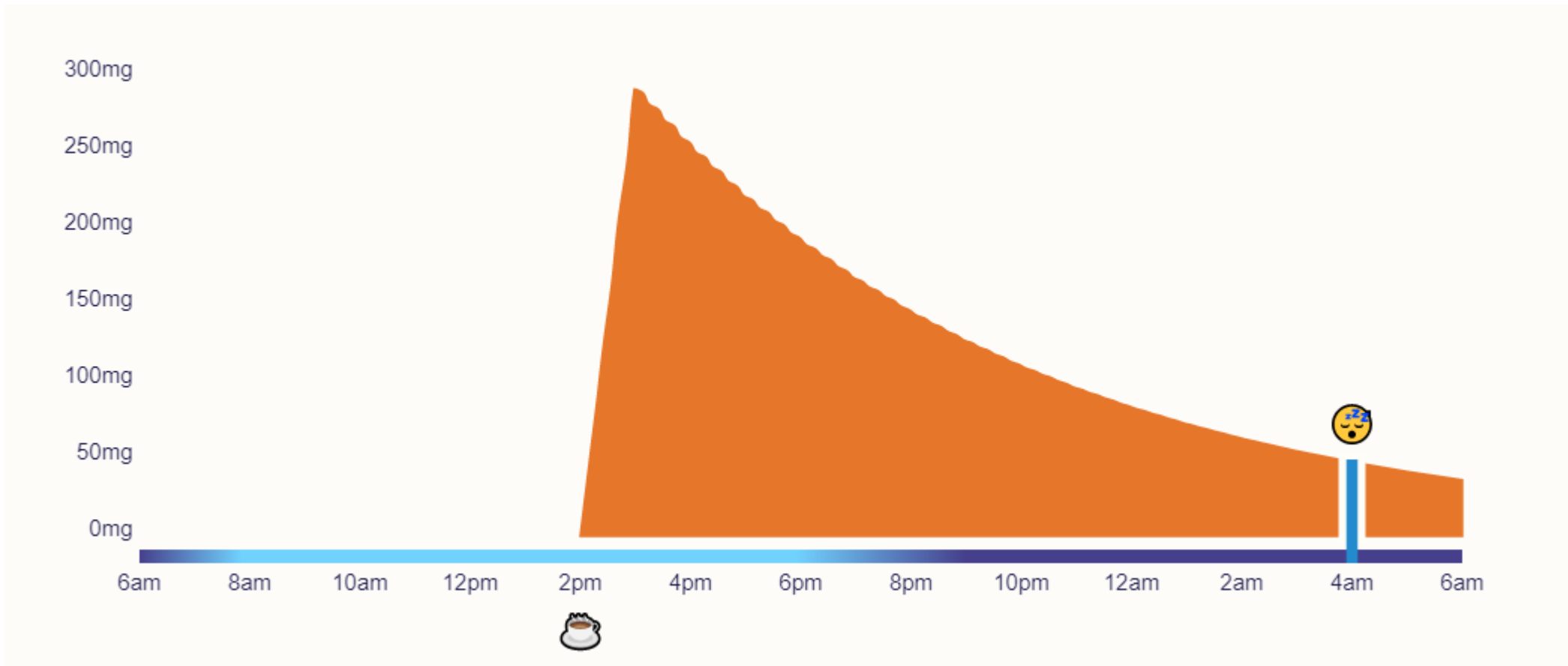
# Stay away from caffeine late in the day



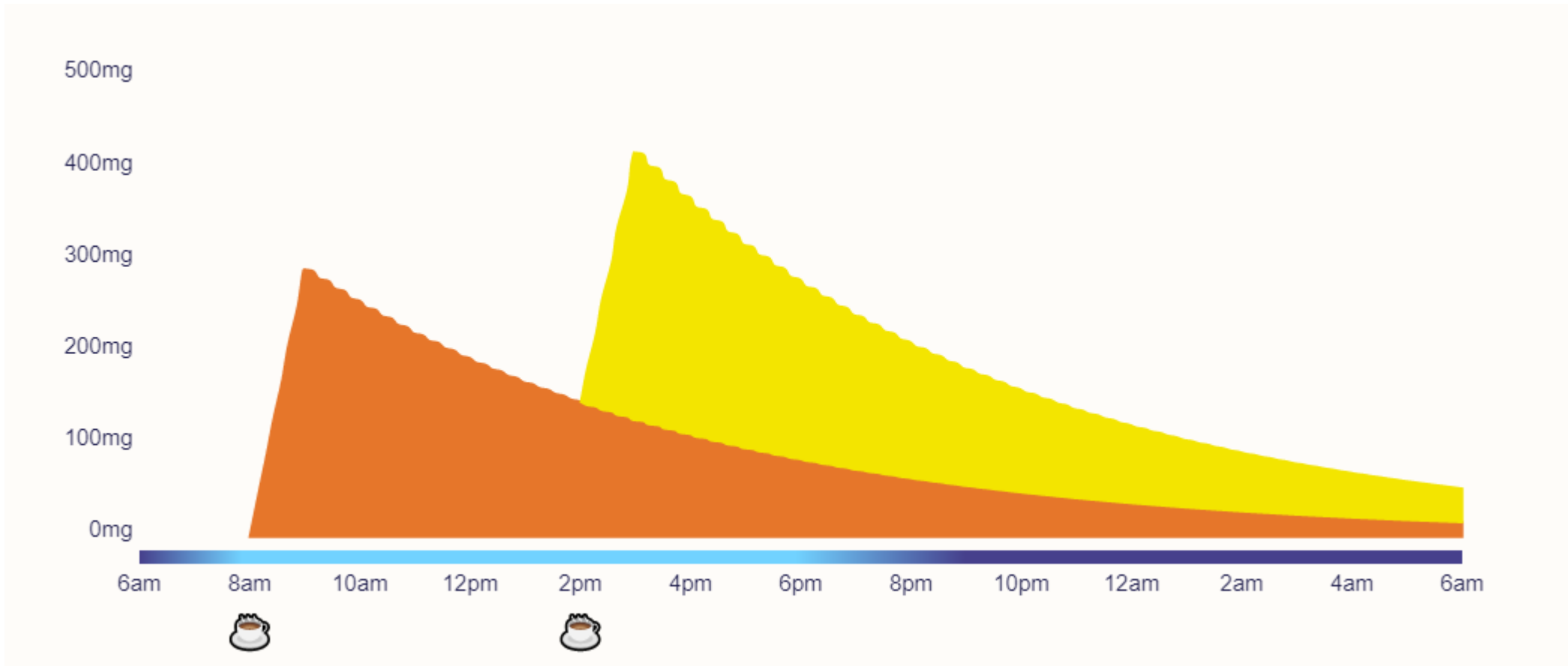
# Stay away from caffeine late in the day



# Stay away from caffeine late in the day



# Stay away from caffeine late in the day



Now go on and sleep!



# Thank You