



# SLEEP

## Sleep Education for Everyone Program

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## Facilitators

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**Naomi Hyso & Nicole Persing-Wethington, Extension Educators,  
MSU Extension Health and Nutrition Institute**



## Objectives

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- Understand the importance of sleep for both physical and mental health
- Recognize the importance of sleep hygiene.
- Identify strategies to improve sleep
- Learn how to participate in, refer to, SLEEP



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## The Importance of Sleep

### Physical and Mental Health



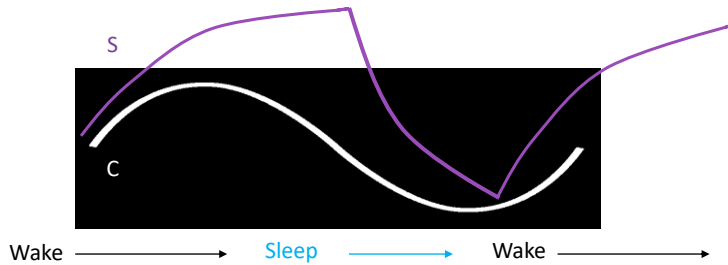
## What is sleep?



- A period of reduced responsiveness to the outside world, usually associated with immobility, that is reversible.
  - Appears to be essential.
  - We don't know why we sleep.
    - MANY physiological processes occur during sleep.



## How do we sleep?

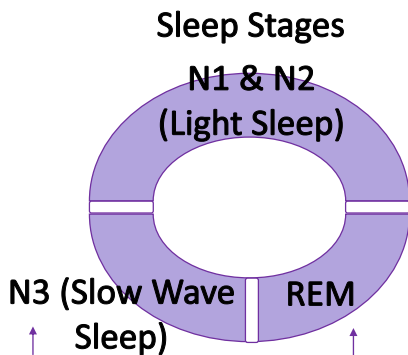


- Two systems:
- S = homeostatic sleep drive (sleep debt)
  - C = circadian rhythm (alertness); heavily influenced by light exposure
- Point of largest difference promotes sleep
  - Melatonin works on circadian rhythm

Image adapted from Nestler et al.: [https://neurology.mhmedical.com/data/books/1204/nes003\\_fig\\_13-04.png](https://neurology.mhmedical.com/data/books/1204/nes003_fig_13-04.png)

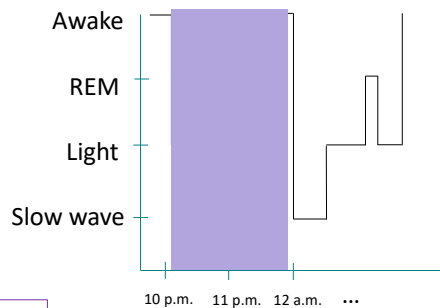


## Sleep Stages



Restorative sleep; affected by stress, sleep disruption, aging

Dreaming; memory stabilization; emotional control; PTSD; occurs for longer durations at the end of the night; tends to suffer more when not getting enough sleep



Takes ~ 90 minutes to complete one sleep cycle.

<https://www.ninds.nih.gov/health-information/public-education/brain-basics/brain-basics-understanding-sleep>



## How much sleep did you get last night?

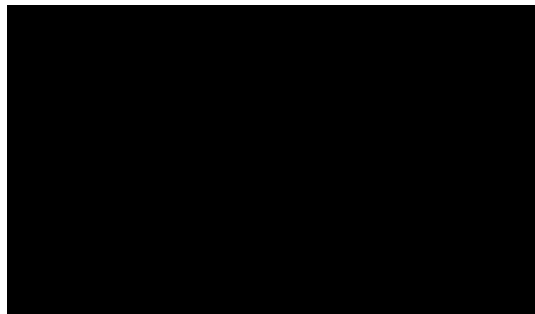
How much sleep did you get last night?

- A. Less than 6 hours
- B. More than 6 but less than 7 hours
- C. Between 7 – 9 hours
- D. More than 9 hours



## How much is enough?

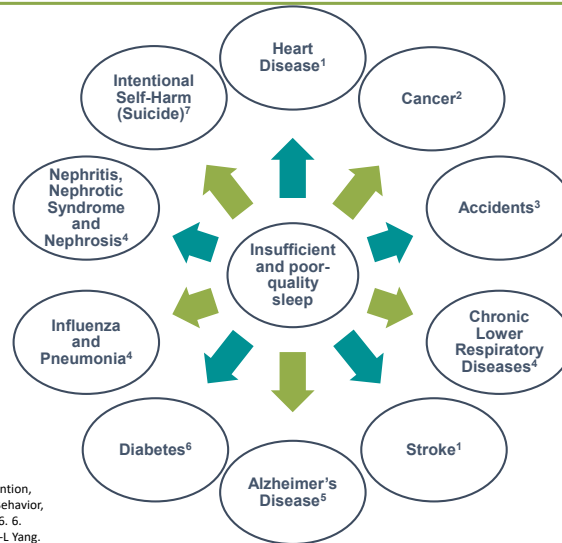
Newborn	Infant	Toddler	Preschool	School Age	Teen	Young adult	Adult	Older adult (65+)
14-17 h	12-15 h	11-14 h	10-13 h	9-11 h	8-10 h	7-9 h	7-9 h	7-8 h





## Sleep and Physical Health

**Sleep problems are linked to the 10 leading causes of death.**



1. Cappuccio et al., *Eur Heart J.*, 2011. 2. Zhao et al., *Asian Pacific Journal of Cancer Prevention*, 2013. 3. Lemke et al., *Accident Analysis & Prevention*, 2016. 4. Opp and Krueger, *Brain, Behavior, and Immunity*, 2015. 5. Tworoger et al., *Alzheimer Disease & Associated Disorders*, 2006. 6. Yaggi et al., *Diabetes Care*, 2006. 7. Zhai et al., *Depression and Anxiety*, 2015. Slide by C-L Yang.

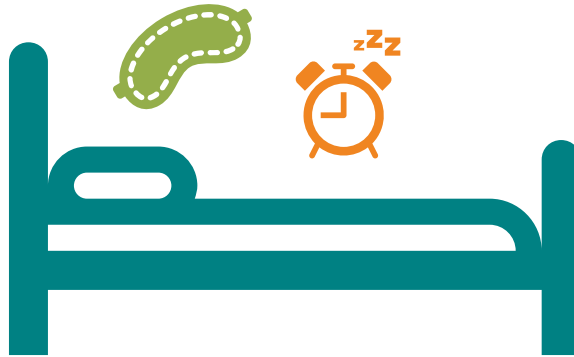


## Sleep Hygiene



## What is Sleep Hygiene?

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## Why does Sleep Hygiene Matter?

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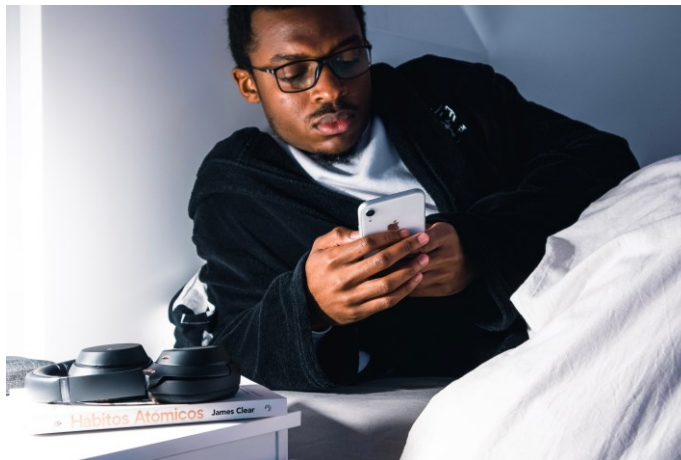


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## Strategies to Improve Sleep

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### Goals and Actions



## Consistent Bed and Wake Times

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- **Wake up and go to bed at the same time every day, even on the weekends!**







## Limit Naps

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- If you have trouble falling or staying asleep at night, naps are not recommended

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## Caffeine Consumption

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- Caffeine should be avoided 6 hours before bedtime



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## Food



- If you are hungry, a small snack before bed can make it easier to sleep
- Avoid large meals, high fat, spicy or acidic foods before bed

Photo by Splitshire via Pexels



## Alcohol & Nicotine

- Avoid nicotine and alcohol for at least 2 hours before bed



Photo by Olha Ruskykh via Pexels



## Going to Bed Only When Tired

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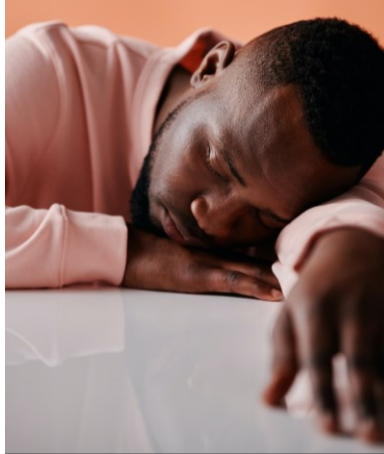
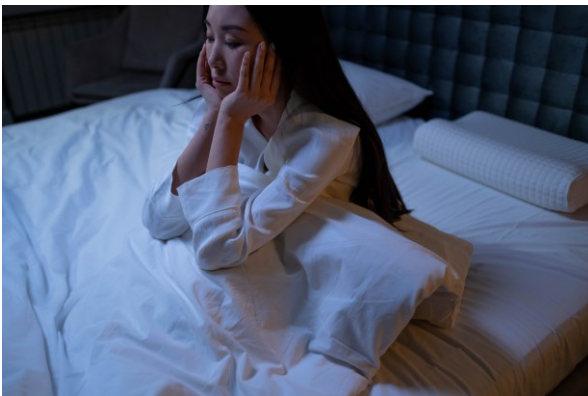


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## Getting Out of Bed When Unable to Sleep

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- If you don't fall asleep within 10 minutes, get up and do something boring

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## Bedroom

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- **Reserve your bed and bedroom for sleeping**
- **Assess your sleep environment**
- **Comfort is key!**



Photo by [Lisa](#) from [Pexels](#)



## Electronics

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- **Reduce screen time leading up to bed**

Photo by [Ola Dapo](#) from [Pexels](#)



## Avoid Blue Light

- **Blue light reduces melatonin which is our bodies signal to go to sleep**
  - **Avoid blue light from screens, televisions, tablets, computers and phones**



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## Mental Activity



- **Find time to clear your mind before bed**

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## Mindfulness

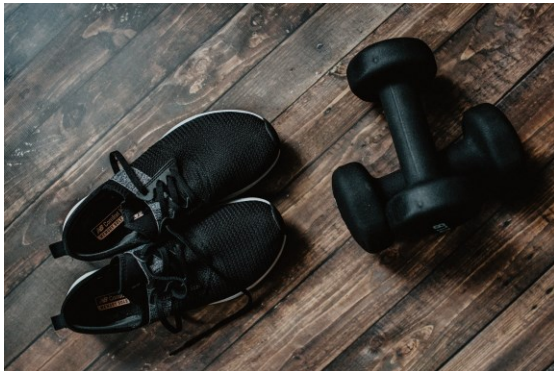
- Mindfulness techniques such as body scans or breathwork can promote falling asleep



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## Physical Activity



- Get daily physical activity
- Limit exercising to the point of sweating within 1 hour of going to bed

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## Sleep Education for Everyone Program

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## Background

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- In 2019, the Michigan Health Endowment Fund awarded a grant to Michigan State University (MSU) to develop **evidence-based** sleep-related programming targeted to older adults, and the SLeep Education for Elders Program (SLEEP) was born.
- Our funding source was designed to improve the health of older adults, but SLEEP can also stand for the SLeep Education for Everyone Program – **there is nothing in the program that can't apply to younger adults**. For that reason, we do not restrict participation based on age.





## SLEEP



6 Week Program



30 Minute Sessions



Developed with sleep medicine expert, MSU Extension health educators, based on elements of CBTi



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## Session Topics

Session	Topic
1	Introduction to sleep and health, recommended duration guidelines
2	Sleep hygiene best practices
3	Stimulus control therapy to get to sleep faster
4	Mindfulness and relaxation to improve sleep
5	Relationships between sleep and physical activity
6	Sleep myths, review and wrap-up
Sleep Nudges	Email messages sent monthly to remind participants of the content covered in the program.





## Michigan State University Extension Programs

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[extension.msu.edu/healthprograms](https://extension.msu.edu/healthprograms)

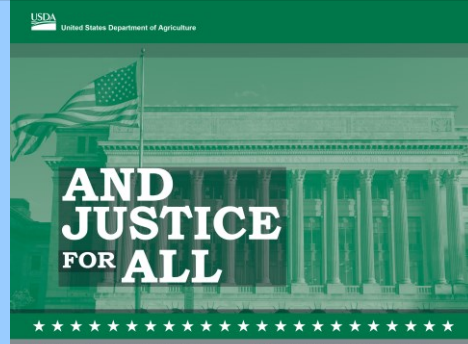


## Questions

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