Better Sleep - Better You:

Learn Sleep Hygiene Skills that Can Enhance Your Health & Wellbeing

Presented by Debbie Lyn Toomey MSN, RN

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NO CONFLICT OF INTEREST

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This program is based on research and the experience of the presenter.
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OVERVIEW

1. Define sleep
2. Discuss Non-REM and REM sleep
3. List barriers to sleep
4. Share common chronic diseases and conditions associated with chronic sleep deprivation
5. List sleep hygiene activities that promote better sleep
6. Explain Sleep Yoga and its benefits

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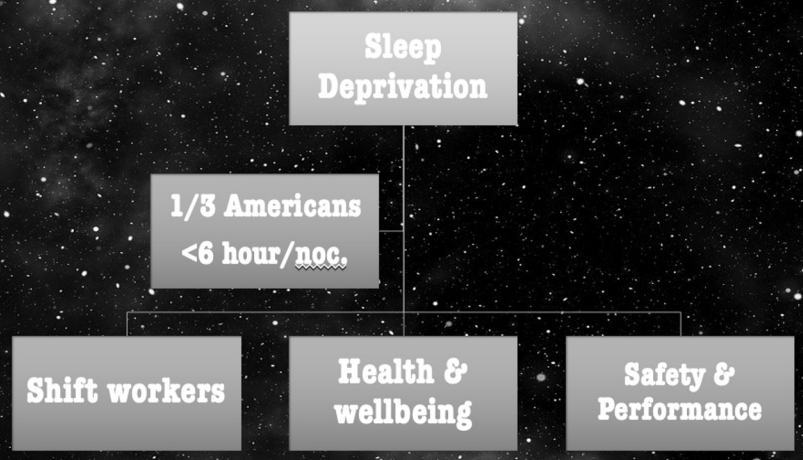
PUBLIC HEALTH EPIDEMIC (CDC)



Source:
- Centers for Disease Control and Prevention (CDC) (2012). Short sleep duration among workers–United States, 2010. MMWR. Morbidity and mortality weekly report, 61(16), 281–285 https://www.cdc.gov/niosh/emres/longhourstraining/debt.html

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MERRIAM WEBSTER DICTIONARY

"...the absence of wakefulness ... accompanied by ...the occurrence of dreaming and changes in brain activity and physiological functioning, is made up of cycles of non-REM sleep and REM sleep, and is usually considered essential to the restoration and recovery of vital bodily and mental functions."

Source:
- https://www.merriam-webster.com/dictionary/sleep

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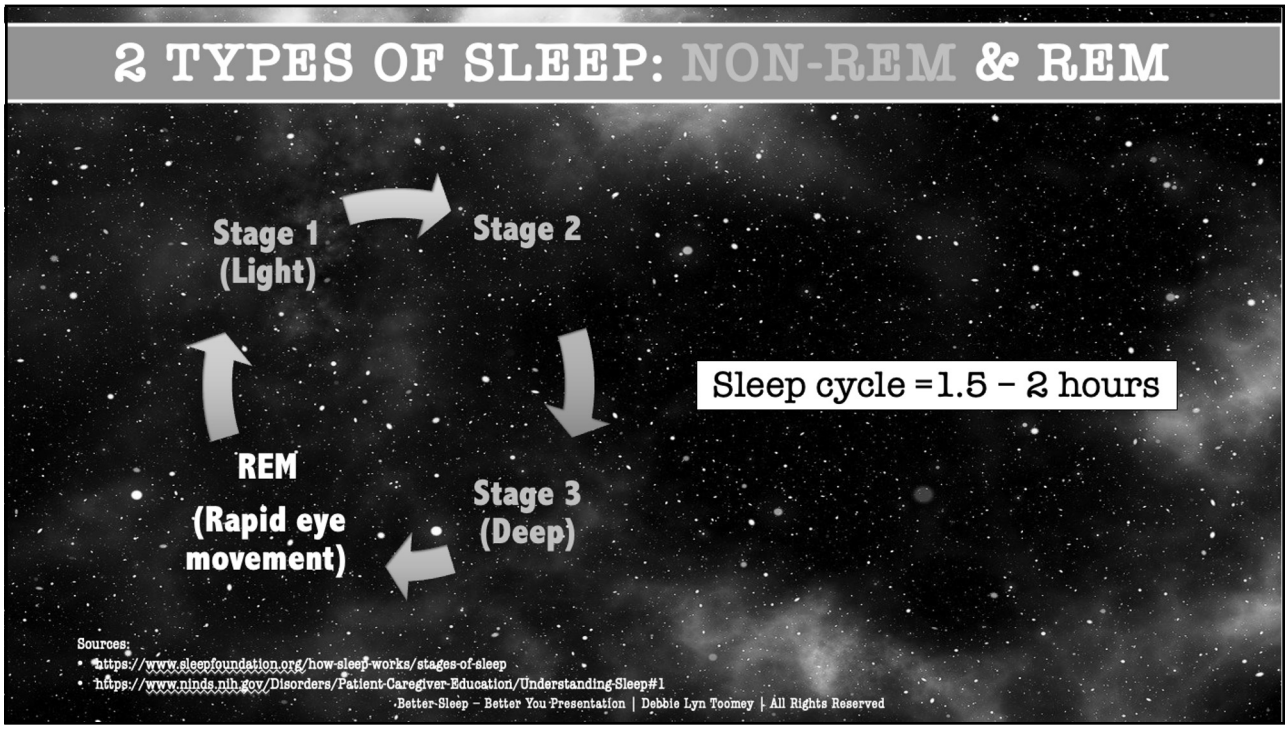
2 TYPES OF SLEEP: NON-REM & REM
Stage 1 (Light)
Stage 2
Stage 3 (Deep)
REM (Rapid eye movement)
Sleep cycle =1.5 – 2 hours
Sources:
• https://www.sleepfoundation.org/how-sleep-works/stages-of-sleep
• https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep#1
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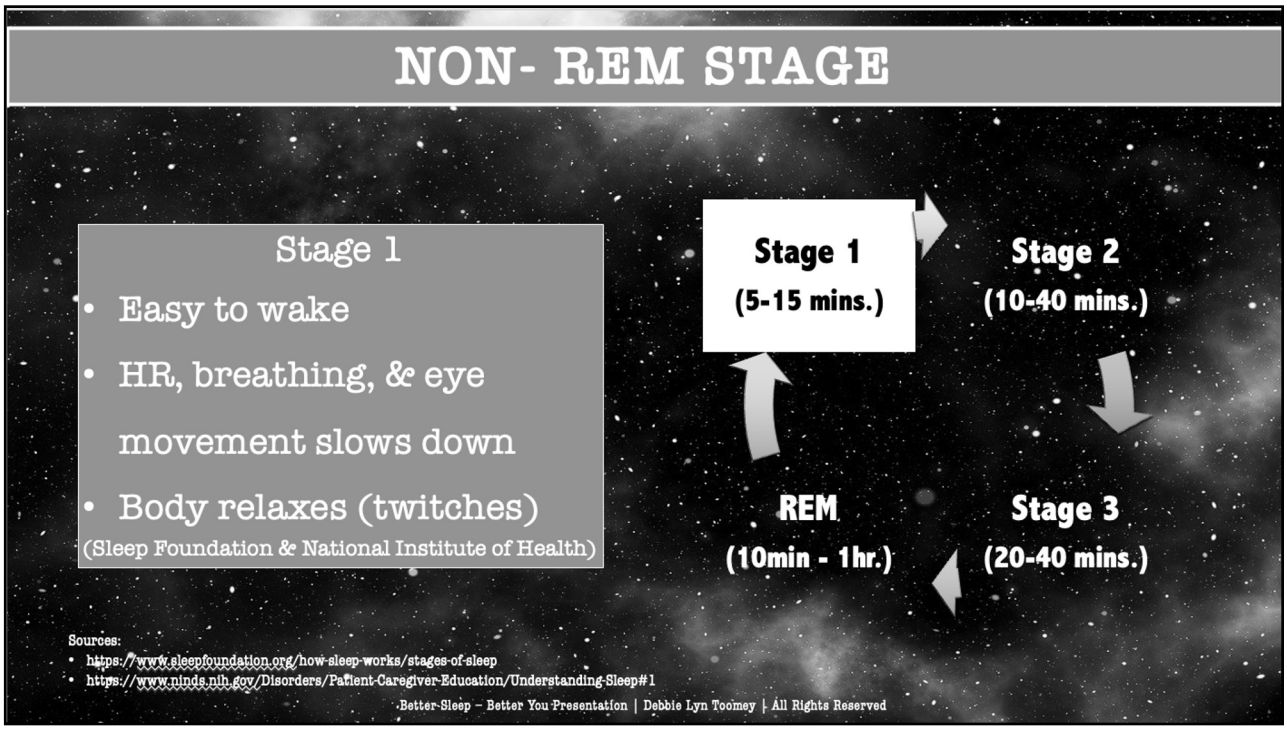
NON- REM STAGE
Stage 1
• Easy to wake
• HR, breathing, & eye movement slows down
• Body relaxes (twitches)
(Sleep Foundation & National Institute of Health)
Stage 1 (5-15 mins.)
Stage 2 (10-40 mins.)
Stage 3 (20-40 mins.)
REM (10min - 1hr.)
Sources:
• https://www.sleepfoundation.org/how-sleep-works/stages-of-sleep
• https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep#1
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NON- REM STAGE

Stage 1
(5-15 mins.)

Stage 2
(10-40 mins.)

Stage 3
(20-40 mins.)

REM
(10min - 1hr.)

Stage 2

- Light sleep
- HR & breathing slows
- Eye movements stops
- Body temp. drops

(Sleep Foundation & National Institute of Health)

Sources:
- https://www.sleepfoundation.org/how-sleep-works/stages-of-sleep
- https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep#1

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NON- REM STAGE

Stage 1
(5-15 mins.)

Stage 2
(10-40 mins.)

Stage 3
(20-40 mins.)

REM
(10min - 1hr.)

Stage 3

- Difficult to arouse
- HR & breathing at lowest rate
- Body is recharging!

- Restore energy
- Regenerate cells
- ⬆ blood supply to muscles
- Growth & repair (tissues & bones)
- Strengthen immune system

(Sleep Foundation & National Institute of Health)

Sources:
- https://www.sleepfoundation.org/how-sleep-works/stages-of-sleep
- https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep#1

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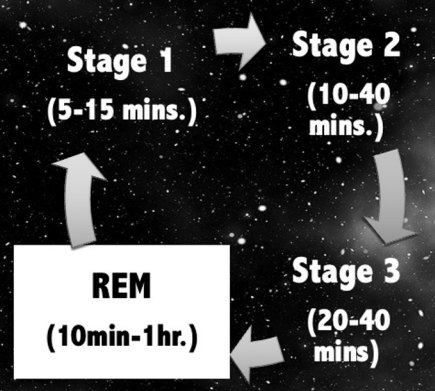
RAPID EYE MOVEMENT (REM) STAGE

REM

- Extremities temporarily paralyzed
- Vivid dreams
- Breathing, HR, & BP increases
- Brain is processing data, storing memories, and upgrading its system

(Sleep Foundation & National Institute of Health)



Source:
- https://www.sleepfoundation.org/how-sleep-works/stages-of-sleep
- https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep

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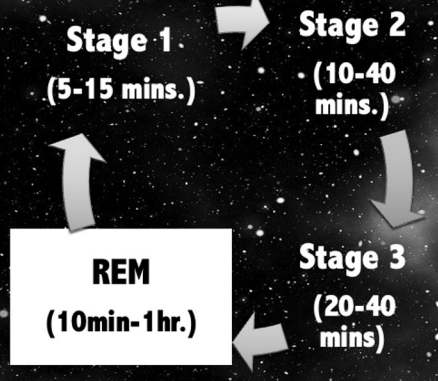
RAPID EYE MOVEMENT (REM) STAGE

Brain Health & Function

- Enhances cognitive functions: learning, memory, & creativity
- Optimizes neural connections: physical, mental, & emotional health
- Removes toxins that build up in the brain while awake

(Sleep Foundation & National Institute of Health)



Source:
- https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Understanding-Sleep

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What gets in your way of getting good quality sleep?

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10 COMMON BARRIERS

- Sleep not honored
- Stress
- Sleep disorders (>80)
- Medical condition or Pregnancy
- Shift work
- Alcohol, Caffeine, Sleeping tablets
- Jet lag
- Drug side effects
- Eat/Drink late at night
- No sleep hygiene

Source:
- https://www.sleephealthfoundation.org.au/files/pdfs/Common-Causes-Inadequate-Sleep.pdf

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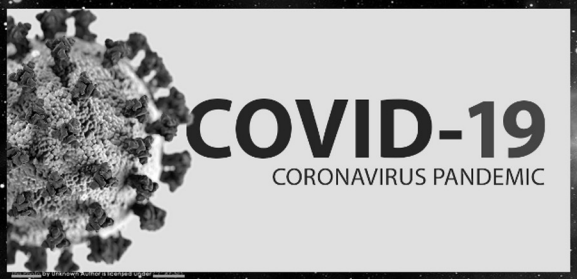
WERE YOU IMPACTED BY CORONASOMNIA?

AASM March 2021 Survey
"Coronasomnia"

Out of 2,006 U.S. adults, 56% had an increased in sleep disturbances since the start of the COVID-19 pandemic.

(American Academy of Sleep Medicine)



Source:
- https://j2vjt3dnbra3ps7ll1clb4q2-wpengine.netdna-ssl.com/wp-content/uploads/2021/04/sleep-prioritization-survey-2021-covid-somnia.pdf

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HOW THE PANDEMIC IMPACTED SLEEP

Survey reported people had problems with:

- Falling asleep or staying asleep
- Getting less sleep
- Having poor sleep quality
- Having increased nightmares

(American Academy of Sleep Medicine)

Source:
- https://j2vjt3dnbra3ps7ll1clb4q2-wpengine.netdna-ssl.com/wp-content/uploads/2021/04/sleep-prioritization-survey-2021-covid-somnia.pdf

Source (image): Pixabay

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What happens to your health and wellbeing when you are not getting enough sleep?

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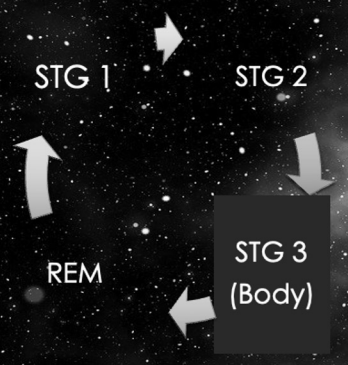
SLEEP DEPRIVATION IMPACTS HEALTH

Linked with **7 out of 15** leading causes of death in the U.S. (Hafner et al., 2017)

1. Cardiovascular disease
2. Cancer
3. Accidents (unintentional injuries)
4. Stroke
5. Diabetes (Type 2)
6. Septicemia
7. HTN



Source:

- Hafner M., Stepanek, M., Taylor, J., Troxel, W. M., & van Stolk, C. (2017). Why Sleep Matters-The Economic Costs of Insufficient Sleep: A Cross-Country Comparative Analysis. Rand health quarterly, 6(4), 11.

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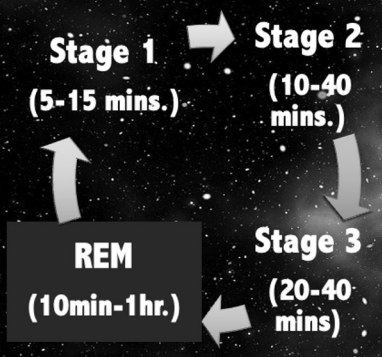
SLEEP DEPRIVATION IMPACTS WELLBEING

Survey of 1215 "Non-depressed interns"

Sleep disturbance and short sleep **increased risk for depression and perceived medical errors** in 1st year residents. (Kalmbach et al., 2017)



Source:

- Kalmbach, D. A., Arnedt, J. T., Song, P. X., Guille, C., & Sen, S. (2017). Sleep Disturbance and Short Sleep as Risk Factors for Depression and Perceived Medical Errors in First-Year Residents. Sleep, 40(3), zsw073. https://doi.org/10.1093/sleep/zsw073

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What can you do to protect your sleep?

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SHORT & LONG TERM SOLUTIONS

1. Take naps
2. Add to sleep time
3. Determine root cause
4. Establish sleep hygiene (CDC)

Source:
- Centers for Disease Control and Prevention (CDC) (2012). Short sleep duration among workers–United States, 2010. MMWR. Morbidity and mortality weekly report, 61(16), 281–285
- https://www.cdc.gov/niosh/emres/longhourstraining/debt.html

Source (image): Pixabay

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WHAT IS SLEEP HYGIENE?

A series of decisions, actions, and habits that are done at pre-bedtime and at bedtime, routinely and consistently, to help ensure quality of sleep. (Sleep Foundation)

Sources:
- https://www.sleepfoundation.org/sleep-hygiene

Source (image): Pixabay

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10 SLEEP HYGIENE SKILLS & TRICKS

- Bedtime Routine – 24/7
- Cool, Comfortable, & Calming Bedroom
- Electronics Curfew
- Vitamin and Minerals
- No Large Meals, ETOH, Nicotine, & Caffeine @ bedtime

Source (images): Pixabay

Sources:

- https://www.cdc.gov/sleep/about_sleep/sleep_hygiene.html
- http://sleepeducation.org/essentials-in-sleep/healthy-sleep-habits

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MORE SLEEP HYGIENE SKILLS & TRICKS

- Can't Fall Asleep After 20 mins. Get Out of Bed
- Weighted Blankets (Ekholm, Spulber, & Adler, 2020)
- Aromatherapy (Takeda, Watanuki, & Koyama, 2017)
- Gratitude (Emmons & McCullough, 2003)
- Relaxing activities – Reading, Yoga, etc.

Source (images): Pixabay

Sources:

- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life. Journal of personality and social psychology, 84(2), 377–389. https://doi.org/10.1037//0022-3514.84.2.377
- Ekholm B, Spulber S, Adler M. A randomized controlled study of weighted chain blankets for insomnia in psychiatric disorders. J Clin Sleep Med. 2020;16(9):1567–1577.
- Takeda, A., Watanuki, E., & Koyama, S. (2017). Effects of Inhalation Aromatherapy on Symptoms of Sleep Disturbance in the Elderly with Dementia. Evidence-based complementary and alternative medicine : eCAM, 2017, 1902807. https://doi.org/10.1155/2017/1902807

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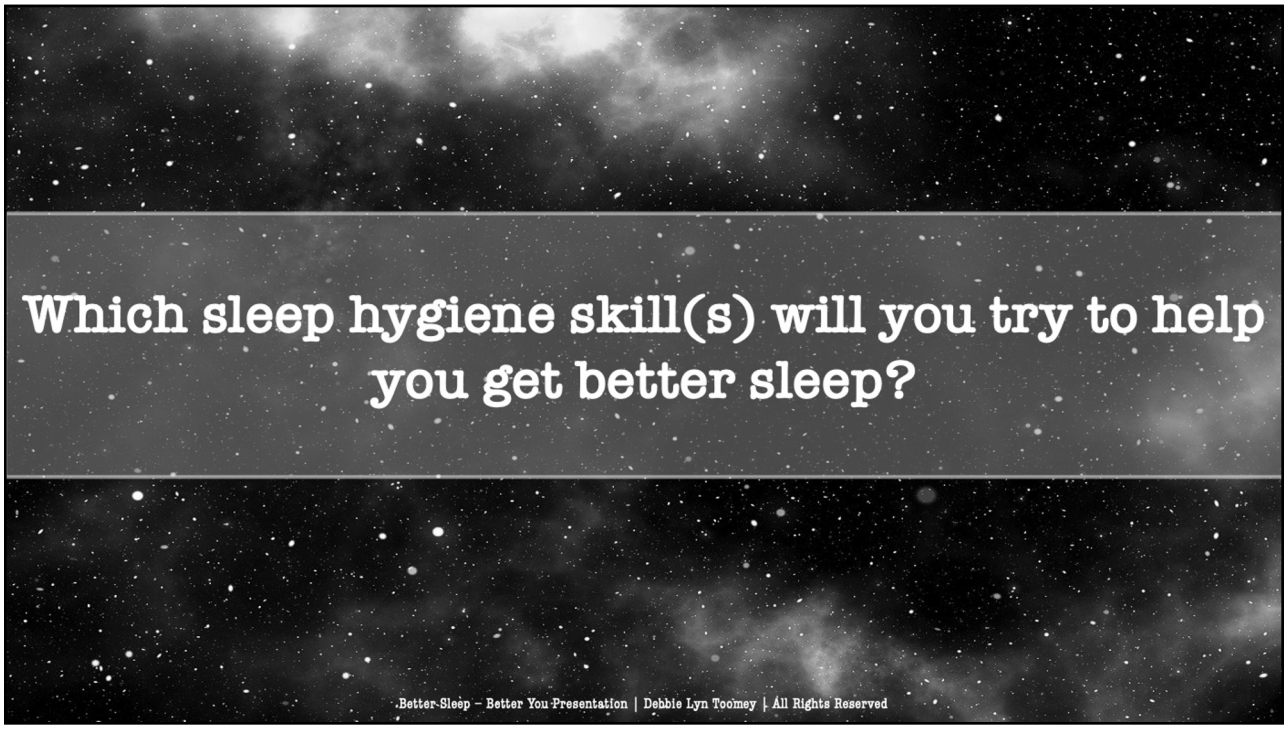
Which sleep hygiene skill(s) will you try to help you get better sleep?
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YOGA NIDRA

"Yoga – Union"

"Nidra – Sleep"

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YOGA NIDRA

Gentle form of yoga that guides you to focus on your breath and body through guided meditation.

Conscious way of offering you deep relaxation in a sleep state.

Yogis report - 45 minutes feels like having 3 hours of sleep.

Sources:

- https://www.sleep.org/can-yoga-help-sleep-better/
- https://www.yogajournal.com/meditation/your-brain-on-yoga-nidra/

Source: Pixabay

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YOGA NIDRA BENEFITS

Positive results with patients with menstrual abnormalities, PTSD, diabetes, anxiety, depression, and sleep disorders.

(Datta, Tripathi, & Mallick, 2017)

Source:
- Datta, K., Tripathi, M. & Mallick, H.N. Yoga Nidra: An innovative approach for management of chronic insomnia- A case report. Sleep Science Practice 1, 7 (2017). https://doi.org/10.1186/s41606-017-0009-4

Source: Pixabay

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Source:
- https://giphy.com/gifs/headlikeanorange-ocean-sunset-headlikeanorange-Y1fq6cFqB6Jlm

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REVIEW

1. Defined sleep
2. Discussed Non-REM and REM sleep
3. Listed barriers to sleep
4. Shared common chronic disease and conditions associated with chronic sleep deprivation
5. Listed sleep hygiene activities that promote better sleep
6. Explained Sleep Yoga (Yoga Nidra) and its benefits

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ADDITIONAL RESOURCES

1. National Institute for Occupational Safety and Health (NIOSH) → NIOSH Training for Nurses on Shift Work and Long Work Hours. Training for nurses, administrators, and safety professionals. https://www.cdc.gov/niosh/docs/2015-115/default.html
2. Sleep Foundation. https://www.sleepfoundation.org/
3. American Academy of Sleep Medicine (AASM). https://aasm.org/clinical-resources/
4. CDC. https://www.cdc.gov/sleep/index.html
5. Examine.com (health and nutrition) https://examine.com/

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THANK YOU!

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