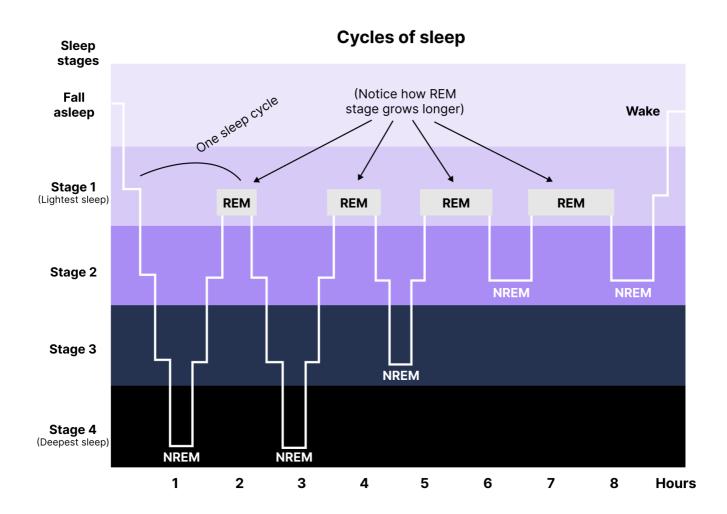
Sleep Cycle Diagram



Sleep stages

- Stage 1 (Light sleep): Transition from wakefulness to sleep.
- Stage 2: Light sleep with sleep spindles, marking the onset of deeper sleep.
- Stage 3: Deep or slow-wave sleep, crucial for physical recovery.
- **Stage 4 (Deepest sleep)**: The deepest stage of non-rapid eye movement (NREM) sleep, essential for restoration.

REM sleep

This occurs after NREM stages and characterized by rapid eye movement (REM) and is associated with dreaming and cognitive functions. REM periods lengthen as the night progresses.

Sleep cycles

Each cycle lasts about 90 minutes, including all NREM stages, followed by REM sleep. The diagram shows multiple cycles with increasing REM durations.

NREM sleep

Includes Stages 1 to 4, focusing on physical restoration.

Cycle progression

Depth and duration of each stage change throughout the night, with lighter stages becoming more frequent toward morning.

Additional notes

References

Chichi, S. (2020, June 25). *Sleep Cycles Progression: Understanding the Mechanism*. Nightingold. https://www.nightingold.com/en/sleep-cycles-and-stages/

Coelho, S. (2020, November 30). *Sleep cycle stages: Chart, durations, and how to improve sleep*. Medical News Today. https://www.medicalnewstoday.com/articles/sleep-cycle-stages

Robinson, J. (2022, November 16). *What Are REM and Non-REM Sleep?* WebMD. https://www.webmd.com/sleep-disorders/sleep-101

Suni, E., & Singh, A. (2023, December 8). *Stages of sleep: What happens in a sleep cycle*. Sleep Foundation. https://www.sleepfoundation.org/stages-of-sleep