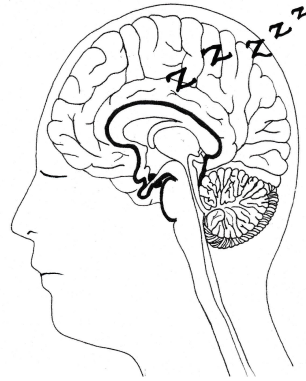


The Sleeping Brain

Why sleep is important:

- ❖ Growth hormones are released during sleep that promote growth and rebuild muscles and joints
- ❖ Heart slows down during non-REM sleep, reducing heart rate and blood pressure, allowing heart to rest, repair and heal
- ❖ Breathing rate slows down
- ❖ Body and brain repair and rejuvenate during sleep
- ❖ Poor sleep adversely affects mood, emotional resilience, brain and heart health, immune system response, productivity, creativity, vitality, weight, and attentive behavior needed for learning, focusing, reacting, and staying alert and safe
- ❖ Sleep deficiency linked to many chronic health problems, including heart disease, kidney disease, high blood pressure, diabetes, stroke, obesity and depression
- ❖ Memory is consolidated during sleep: myelination, the strengthening of neural pathways is heightened
- ❖ Glial cells clean the brain of residue and toxins during sleep
- ❖ Some parts of the brain are more active during sleep; the hippocampus sorts and consolidates significant events and memories.



Recommended hours of sleep per 24 hours:

4-12 months	12-16 hours
1-2 years	11-14
3-5 years	10-13
6-12 years	9-12
13-18 years	8-10
18+ years	7-9

If you get enough hours of sleep, but regularly wake up and still feel fatigued, there may be medical factors that are affecting your sleep and you should consult a physician.

How to promote better sleep:

- ❖ Keep a regular sleep-wake schedule
- ❖ Exercise daily
- ❖ Avoid evening caffeine, alcohol and cigarettes
- ❖ Set the stage to signal your brain that you are ready to sleep, such as
 - Turn off bright lights; stop using phones, tablets, computers at least 1 hour before bed; bright light slows down accumulation of melatonin and adenosine, which provoke sleep
 - Have a warm shower or bath
 - Listen to soothing music or sounds to help clear your mind of stressful issues
 - Use blackout blinds, curtains, eye shades
 - Have clean, comfortable mattress, pillows and linens. (If you notice that you typically wake up with nasal or breathing congestion, it is a signal to clean/change pillows)
 - Reduce noise levels; wear earplugs
 - Lower the heat to 15-19 degrees Celsius (the body's internal temperature drops during the night to conserve energy)
 - Wearing socks to bed can help in lowering core body temperature

If you wake up and cannot go back to sleep for over 20 minutes, go to another room and do something relaxing, like reading a book or magazine, or listening to soothing music. Keep a pen and paper nearby to record things you need to remember.