GOAL - Regular good sleep

QUANTITY: 7-9 hours (Add 30-60 minutes in-bed awake time to target sleep hours)
QUALITY: Minimal disruptions during the night
Good electrical quality of sleep (hard to measure outside a lab)
ROUTINE: Same bedtime/waketime most of the time, including weekends
TIMING: Aligned with natural Circadian Rhythm.

Benefits

- *Energy renewal* - rest, repair, recycling; mitochondria renewal
- *Mind-state renewal* - influence perceptions, impulse control, patience and mood
- *Emotional therapy* - working through difficult experiences, restoring equanimity
- *Memory* - create space for new memory capture; organize, link, solidify
- *Brain Cleansing* - flush metabolic waste from our brains (ex. Amyloid plaques)
- *Immune system restoration, protection* - infection, cancers, and chronic conditions
- *Blood Sugar and Blood Pressure control*
- 🥳 BONUS: Everything you aspire to do when awake becomes more doable 🥳

Increased Risks - Disregulated Processes (examples)

- *Hormone signals to brain* - ↑ to eat & avoid movement; ↓ fullness signals
- *Impulse control mechanism breakdown* - ↑ impatience, ↓ self regulation
- *Reduced capacity for empathy*
- *Loss of therapeutic dream state sleep* - ↓ emotional regulation, ↑ depression, anxiety
- *Loss of accurate social cue perceptions* - ↑ perceptions of threat
- *Loss of time for memory processing, brain detox, energy renewal*

Increased Risk Implications - Outcome Examples

- Alzheimer's Disease
- Heart Attack & Stroke
- Type 2 Diabetes
- Cancer & Infections
- Inflammation/Inflammaging - Brain & Body
- Depression & Anxiety
- ↓ Energy, Memory, Focus

TIMING MATTERS - Important Functions

Deep Sleep (First few hours)
Memory Transfer, frees space for new memories
Rest, Repair, Restore
Brain cleansing of metabolic waste

REM Sleep (last few hours)
Memory - solidify, connect→ learning
creativity, problem solving
Overnight Therapy, mood regulation

Go to bed late? Processes bypassed   *Get up super early? Processes cut short*
 The body runs on circadian rhythm cycles; it runs best when it has a regular strong schedule !

TO DO - Behavior Basics For Good Sleep

Same bedtime/waketime most days. Include weekends

Cool, dark 'sleep cave" → ~18c/64f. Black out blinds, eye masks, cover e-lights

AM Light Exposure → *s*et internal clocks for next 24 hours including melatonin release timer
> AM bright light (within 1 hour waking or as sun rising)
>> 10 minutes sunny morning (averages 100k lux)
>> 15-30 minutes if cloudy (average ~10k lux);
>> If indoors: Max out bright lights; 10k lux SAD light at breakfast table or desk

Start overnight fast 2 hours before bed-time → body cools down & digests food → enough quality deep sleep time for rest, repair, restore & brain detox processes

Wind-down route ~1 hour before sleep
- Light Management - Switch to warm light - Red (best) or amber; candles good (used safely); Table height or lower best
- Bright lights → wake-up signals to the brain; overhead light angles similar effect
- Activities that calm the mind and body - journalling, music, stretching, meditation, screen time OK if relaxing (not too engaging)
- Warm bath or shower → draws heat out from the core → quality sleep

TO AVOID - Kryptonite for Quality Sleep

Cut-off Time Guide (Hours to avoid before bedtime)

2+ Hours - No Food (or drinks with sugar, cream … any substance body must digest)
2-4 hours needed to digest food → pre-empts all other processes (time lost for sleep renewal)

1.5 hours - No Stimulating Exercise
Want low heart rate and low core body temperature → aids falling asleep and sleep quality.
(Consensual sex OK! Not a saboteur)

8 to 12 hours - No Caffeine.
Metabolize and clear from the body → enable fall asleep and stay asleep;
Varies by person/age; may fall asleep fine & not realize waking up in the night.

4 to 8 hours - No Alcohol.
Goal: Metabolize and clear out as much as possible → stay asleep, protect electrical quality for deep sleep processes, protect REM sleep processes