

Fast Facts for Matthew Walker's Why We Sleep

- 2/3 of adults worldwide do not receive the recommended 8 hours of nightly sleep
- Humans are the only species that deprive themselves of sleep
- Genetically, humans have massively varying sleep cycles. Morning vs Evening people.
- Caffeine has a half-life of ~6 hours. Drinking 1 coffee at 6pm = drinking 0.5 coffees at midnight
- Most natural sleep pattern is the mid afternoon nap with 7 hours of sleep at night
- Study of 23 000 Greek adults saw that there was a 37% increased risk of death from heart disease across six-year period when siestas stopped.
- A teenager going to bed at 10 is similar to an adult going to bed at 730
- A teenager waking up at 7 is similar to an adult waking up at 430
- Sleep efficiency decreases with age. Need more time in bed trying to sleep to get same results
- Sleep is not the absence of wakefulness. It nourishes the mind and body and is a very active process. "Sleeping" while high on drugs (medicine as well) or alcohol is not a real sleep
- Sleeping before learning lets your brain be ready to learn
- Sleeping after learning allows one to save memories properly. Need at least 3 days of solid sleep after learning something to actually commit it to long-term memory
- When learning a physical skill, you will be better at it after sleeping. Piano ex.
- 30% improvement in newly learned motor skills after a full night's sleep
- % chance of injury rapidly rises as sleep hours decrease.
- Depriving sleep is so bad for you that it was struck from the Guinness Book of World Records.
- After one night of no-sleep, # of attention lapses (microsleeps) increase 400%. Same if you have 4 hours for six nights, or 6 hours for ten nights. Very dangerous for driving.
- "Sixty years of scientific research prevent me from accepting anyone who tells me that he or she can "get by on just four or five hours of sleep a night just fine.""
- Chance of getting in a car crash with sleep loss:
 - 6- 7 hours 1.3x
 - 5-6 hours 1.9x
 - 4-5 hours 4.3x
 - <4 hours 11.5x
- Recovery sleeping doesn't work. More than 3 nights of a full 8 hours are not enough to recover from 4 days of 6 hours.
- 1.2 million american car crashes are caused by drowsy driving
- Drunk drivers are often late to react, drowsy drivers **don't react**.
- Sleeping less than 6 hours a night increases risk of heart disease by ~300%
- Increase chance of diabetes
- You will feel less full and more hungry when you under-sleep. On average ate 300 calories more in one study. 10 - 15 lbs gained in a year. Sweets cravings increase 40%
- Lack of sleep increase gastrointestinal problems by increasing cortisol (stress-hormone) levels and gets bad bacteria growing in your gut.

- When on a diet, less sleep equals more lean body-mass loss and less fat loss compared to a healthy sleep.
- Limiting sleep to 5 hours a night for a week decreases (men) testosterone by a staggering amount “ages you 10-15 years”. Reduces sperm quality and quantity.
- For women, increase chance of irregular menstrual cycles, chance of sub-fertility, significantly more likely to suffer a first trimester miscarriage
- Studies shown that sleeping more makes you more physically attractive and look healthier.
- Massively decrease chances of getting of the common cold
- Need sleep to make flu shot worthwhile (likely similar for other vaccines)
- A single night of 4 hours of sleep reduces natural killer cells by 70% (these kill cancer cells)
- Study shows sleeping less than 6 hours of sleep a night caused 40% increase in cancers
- Less sleep causes cancer to grow 200% faster in mice
- Dreams act as overnight therapy for you. Most dreaming happens in the 7th and 8th hours of sleep
- Getting proper sleep makes one better at perceiving emotions
- Dream sleep increases creativity and problem-solving abilities significantly.
- In rats, total sleep deprivation killed as quickly as total food deprivation. Just cutting out dream sleep did the same thing. Cutting our non-dreaming sleep killed more slowly.
- Sleeping pills are terrible for you and don't help you actually sleep. Increase chance of all causes death massively
- SAT tests for one American school district rose from 605 to 761 after changing start time from 7:25 to 8:30
- 12 tips to sleep better:
 - Stick to a sleep schedule
 - Exercise often, but not later than 2.5 hours before bed
 - Avoid caffeine and nicotine
 - Avoid alcohol before bed. Robs you of dream sleep
 - Avoid large meals late at night and hydration before bed
 - Avoid sleep-disrupting medication. Benefits don't outweigh risks
 - Don't nap after 3 PM
 - Have time to relax before bed
 - Take hot bath or shower before bed
 - Dark bedroom, cool bedroom, gadget-free bedroom, quiet bedroom
 - Proper (sun)light exposure
 - Don't lie in bed awake.