

How much sleep do you need?

Sleep plays a key role in:

- ✓ Immunity
- ✓ Weight control
- ✓ Blood sugar
- ✓ Risk factors for cancer
- ✓ Cardiovascular conditions
- ✓ Alzheimers
- ✓ Physical and mental recovery



Sleep is not 100% efficient and 6-7.5 hours of restful sleep is needed for a "rested" feeling, and to get you through the day without physical or cognitive impairment.

Sleep opportunity = 7-9 hours in bed gives most people adequate opportunity to sleep.



The number of people that can operate on 6 hours of sleep or less with no physical or cognitive impairment, expressed as a percentage of the population and rounded to a whole number is...

0%

Circadian rhythm



Circa = around
Dian = day

Circadian rhythm is a natural, internal process that regulates the sleep-wake cycle and repeats roughly every 24 hours

Infants

The master clock is still developing so hasn't latched onto the signals such as daylight and temperature changes that control an adult's cycle. This leads to lots of irregular short bouts of sleep through the day and night....much to the despair of any new parents

Adolescence "The lazy teen"

A natural shift occurs in the master clock during puberty, pushing the desire to sleep later in the day. The chemicals that control sleep peak much later, so teens naturally want to sleep later, which also forces a later natural wake time.

In part, this is also due to a change in the need for different stages of sleep as the "critical thinking" part of the brain is the last to fully mature at around 16 years old.



Later life

A natural decline in the ability to produce natural, deep sleep leads to more broken nights of sleep, disrupted timings of sleep and reduced efficiency of sleep - meaning we get less actual sleep in a standard 8 hour period.

Stages of sleep

Stages 1&2

Deep sleep

Stage 3&4

Non-rapid eye movement (NREM) sleep. NREM is key for recovery from physical exertion, cardiovascular health, motor skill learning and much more

Stage 5

Rapid eye movement (REM) sleep. REM is emotional recovery through dreaming



All stages are needed and can't be short changed for a full restful nights sleep. Each cycle through the stages takes around 90 mins.

We binge on deep restful NREM stage 3+4 earlier in the night and spend more time in REM sleep later (early in the morning)
Some substances effect whether/how much we can go into these stages

Do nightcaps help you sleep?

The idea that alcohol before bed helps you get to sleep, or that you can sleep better is unfortunately completely false.



Alcohol is a sedative, which is different to proper, restful sleep. It is more like a light anaesthesia.



Alcohol induced sleep is much more fragmented through the night, causing brief awakenings and disrupting the restorative effects.



Alcohol is one of the most powerful REM sleep suppressors known - which impacts emotional processing, memory integration and association (facts, figures, rules)

Do you need a coffee in the morning to get you going?



We get sleepy from the build-up of the chemical adenosine in the brain that naturally builds the longer we are awake. This causes a sleep "pressure" and makes us feel ready to get some shut eye.

Caffeine blocks the same receptors that adenosine use to make you feel sleepy - great when you need it. The hidden secret is how long caffeine lingers....

On average it takes 5-7 hours to clear just HALF the caffeine from your system, so that last cup of tea or coffee you had with dinner at 7pm will still have plenty of clearing to do at midnight.

Many people who don't find it easy to sleep, or sleep soundly through the night often miss the connection.

Want to learn more about sleep?

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