

# Sleep

“Sleep is your friend.”

Dr Toni Meath

## The important stuff first

**Getting enough sleep is *the* single best thing you can do to enhance your performance as a student.**

Getting enough **sleep increases your brain’s capacity to work well** under pressure, to absorb knowledge, and to retain knowledge.

Study more, sleep less is a major trap for students. Good regular sleep maximises the value you get from study time. **Good sleep is an antidote for stress and anxiety.** And recent research shows that good sleepers put on less weight.

## Why sleep?

We need sleep to exist. Without it we struggle to function anywhere near our best physically, mentally and emotionally.



Our **sleep needs change during our life** cycle. We need up to 15.5 hours a day as babies. Older people need seven to seven and a half hours a night.

The hormonal increases and fluctuations of puberty cause changes to the teenage body which also change sleep patterns.

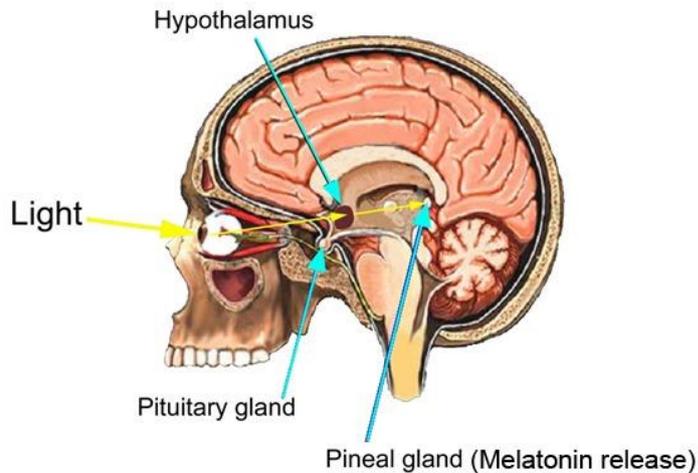
## Teenage sleep

There’s a heap of **research on teenagers and sleep**: two major findings on which there’s no disagreement are that:

- **teenagers need 9.25 hours sleep a night**, not the standard eight hours applied to the general population, and
- **teenage circadian rhythms from puberty to the early twenties are different**: the brain becomes more alert at night and stays in sleep mode until later in the morning.

Unfortunately, school times and student study times don’t fit teenage circadian rhythms. We must do the best we can. **Patterns and regularity** are the keys.

## Sleep science



The suprachiasmatic nucleus (SCN) in the hypothalamus looks after our circadian rhythm, the body's 24-hour biological clock. It regulates when we should be awake and asleep, and controls temperature and blood pressure.

The hormone melatonin, controlled by the brain's pineal gland, affects our sleep

patterns. Its secretion is triggered by darkness, inducing sleep, and light suppresses melatonin release, causing us to wake up.

Before the advent of electric light, especially fluorescent light, we went to bed at sundown and got up at sunrise, but the onset of bright electric light can confuse our brains and alter our sleep patterns.

The best deep sleep comes at the commencement of the sleep cycle, ideally from about 9.30pm to 12.30am.

As children become adolescents the nightly schedule of melatonin release is delayed, leading to later sleeping and waking times.

## Things that stop us getting enough sleep



**The ability to get enough sleep slowly decreases through the teenage years, becoming a problem as bedtimes get later due to the demands of homework, social (media) life, TV, part-time work, and electronic gadgetry.**

*"Consciousness: that annoying time between naps."*

Unknown

## NOSSAL WELLBEING NOTES

Recent research found that the average Australian senior high school student had at least four electronic gadgets in their bedroom.

Mobile phones and tablets are important study tools. The downside is that **texting, gaming and social networking into the early hours of the morning are *the* major enemy of healthy sleep.** And they're hard habits to break.



During the school week **your rule should be 'screens down' one hour before sleep.**

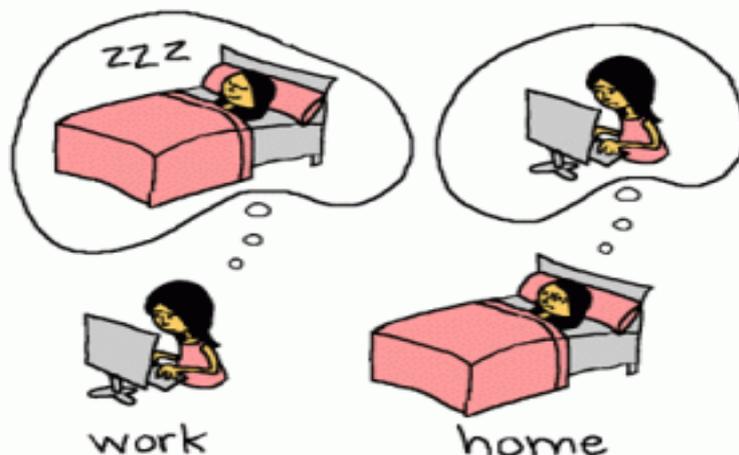
Turn them off to allow the brain an hour to wind down before turning off the light.

Students and their parents should negotiate, set a time to turn off, and stick to it. **The main cause of teenage insomnia** is the failure to establish regular sleep patterns.

### The effects of sleep deprivation

Not getting enough sleep—sleep deprivation—has **major health consequences.** You may be surprised. Sleep deprivation is linked to:

- being more **prone to pimples**
- **decreased ability to cope** with stress, even normal daily pressures, because we become more emotional, more easily irritated, short-tempered and anxious, and consequently more prone to depression
- **global decreases in brain activity**, especially in the thalamus, prefrontal and posterior parietal cortex responsible for the ability to think and solve problems
- **sleepiness during the day** (20-minute naps are OK, but longer dozing stuffs up nightly sleep patterns)
- **physical stress that decreases immunity levels** and increases risk of illness.

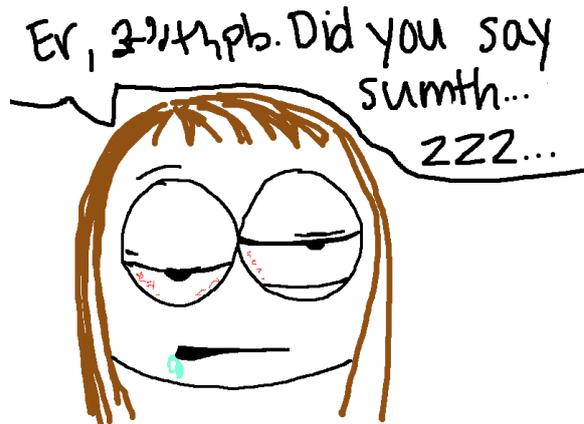


## NOSSAL WELLBEING NOTES

*"A good laugh and a long sleep are the best cures in the doctor's book."* Irish proverb

### Getting better sleep

- **Have a bedtime routine;** go to bed at the same time and get up at the same time, even on weekends. Getting up at the same time is more important than getting to sleep at the same time. Any change in routine will alter your sleep pattern.
- **If you can't get to sleep** after 20 minutes, get up and go back to bed when you are feeling sleepier. Staying in bed when you can't sleep gets you anxious about getting to sleep.
- **Turn off devices that want your attention an hour before bed.** You should wind down for at least 30 minutes before bed. A warm shower is relaxing and gives you more time in the morning. Reading a book (not an e-book) creates drowsiness. If you're inclined, soft background music, the smell of lavender, a warm milk drink.
- **Exercise near bedtime wakes you up.** Exercise in the morning or after school.
- **Good sleep flourishes in a quiet, cool, dark room.** Make your bedroom a peaceful haven. Don't have a heater on overnight.
- **Don't eat a big meal before bedtime:** your last meal should be at least two hours before sleep.
- **Avoid drinks containing stimulants**—caffeine, taurine and guarana, i.e. cola, coffee, tea and energy drinks— in the evening. Stimulants are not conducive to sleep.
- **Writing a 'to do' or worry list before bed** can take a load off your mind that won't let you get to sleep.
- Having and **using an effective study plan** helps keep you up to date with school work: a major stressor reduced.



*"Sleep that knits up the ravelled sleeve of care  
The death of each day's life, sore labour's bath  
Balm of hurt minds, great nature's second course,  
Chief nourisher in life's feast."*

*William Shakespeare, Macbeth*