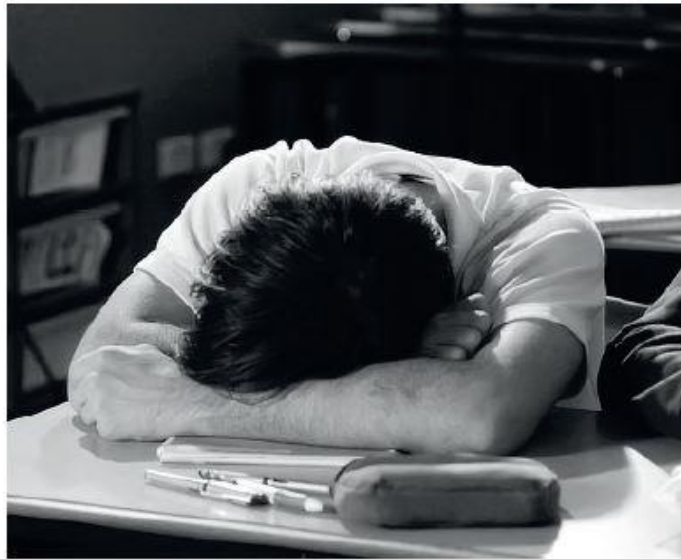




## THE FACTS ABOUT SLEEP



## THE IMPORTANCE OF SLEEP

- Sleep influences both physical and mental health, and a lack of sleep may impact both how we think and act.
- Sleep allows our bodies to rest and repair overnight.
- There are four stages of Non-REM sleep. This process, call homeostasis, can help promote growth through the release of growth hormones.
- We dream during the REM stage of sleep and this is where dreams happen. There is a link between dreaming and learning, so a lack of REM sleep may impact learning outcomes.



## EFFECTS OF SLEEP DEPRIVATION

Sleep deprivation may affect the following areas:

- Cognition (ability to learn, remember, think).
- Psychosocial (how we get along with others).
- Psychological (emotions and mental health)
- Physical health (movement, diet, immunity)



## HOW MUCH SLEEP DO YOUNG PEOPLE NEED FOR OPTIMUM PHYSICAL AND MENTAL HEALTH?

The current thoughts are that teenagers need about nine hours per night. Most teenagers get between 6.5-7.5 hours of sleep<sup>12</sup>, so they are in 'sleep debt'.



## POSSIBLE REASONS FOR DISRUPTED SLEEP PATTERNS IN YOUNG PEOPLE

## 1. Circadian (sleep/wake) rhythm factors

Sleep patterns can be influenced by the hormone melatonin and in adolescents, there is a delay in its release, meaning teenagers may not be tired until later in the evening. This may also impact their ability to get up in the morning as well.

## 2. Life Impacts

Adolescents is a busy time, with the impact of both social and academic expectations. While learning to juggle these, sleep may often be neglected.

12 Better Health Channel, *Teenagers and Sleep*, <https://www.betterhealth.vic.gov.au/health/healthy/living/teenagers-and-sleep>



## PHYSICAL EFFECTS OF SLEEP DEPRIVATION

- Poor immune function may lead to more frequent illness
- Increased weight due to altered patterns of hunger hormones and daily eating patterns
- More prone to injury.



## PSYCHOLOGICAL EFFECTS OF SLEEP DEPRIVATION

- Low mood
- Worried thoughts
- Moodiness
- Lowered levels of tolerance
- Poor concentration



## TECHNIQUES TO IMPROVE SLEEP

## 1. Psychological – Are they worried, stressed, anxious or depressed?

What is impacting their ability to sleep? If a young person appears worried or low in mood, they may benefit from talking to someone, perhaps a mental health professional or school counsellor, or even a trusted adult. Learning relaxation techniques or increasing physical activity can also improve sleep, as can developing regular sleeping patterns.

## 2. Physiological – (Body and physical health)

Ruling out illness and its impact on sleep is a great place to start. If this is a worry, then consult your GP.

## 3. Environmental and behavioural – Are they ready for sleep?

To establish and maintain healthy sleep patterns, children and young people should: avoid caffeine at least six hours before bed, have a consistent bedtime routine, avoid screen time at least one hour before bed and keep screens out of the bedroom<sup>13</sup>.

SLEEP DEPRIVATION AND SCHOOL BEHAVIOUR<sup>14, 15</sup>

When we sleep, our brain rests and repairs. Learning is the domain of the prefrontal cortex in the brain. This part of the brain requires sleep for it to function best. When it does not get the required amount of sleep, adolescents may find it difficult to:

- Learn effectively
- Manage emotions and behaviours
- Concentrate and remember
- Manage time

Lack of sleep has a cumulative effect, meaning that the impact of sleep is ongoing and sleeping in on the weekend will not fix this. The negative impact of poor sleep may leave some young people feeling frustrated and this may impact motivation to engage in education and learning<sup>15</sup>.

## Sources

13 *headspace, Sleeping well for a healthy headspace*, <https://headspace.org.au/young-people/sleeping-well-for-a-healthy-headspace/>

14 Australian Government, Department of Health, *Guidelines for healthy growth & development for children & young people (5 to 17 years)*, [https://www1.health.gov.au/internet/main/publishing.nsf/Content/F01F92328EDADA5BCA257BF0001E720D/\\$File/brochure-24hr-guidelines-5-17yrs.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/F01F92328EDADA5BCA257BF0001E720D/$File/brochure-24hr-guidelines-5-17yrs.pdf)

15 Rasch B, Born J. *About sleep's role in memory*. *Physiol Rev*. 2013;93(2):681-766. doi:10.1152/physrev.00032.2012