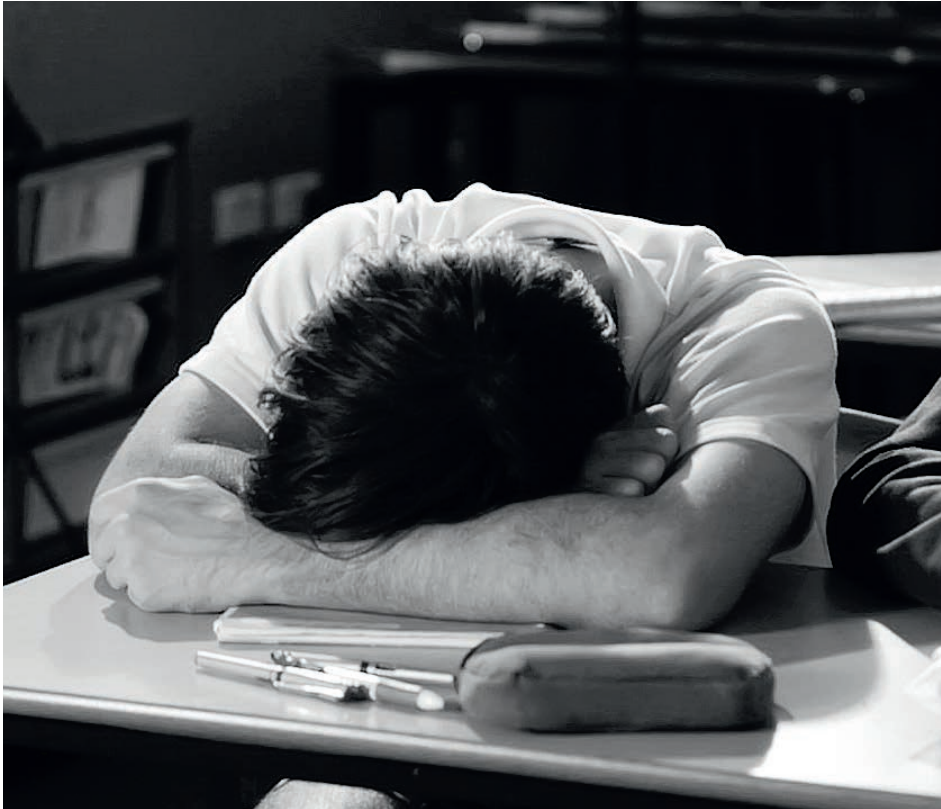




# THE FACTS ABOUT SLEEP



## THE IMPORTANCE OF SLEEP

- Sleep is important for physical and mental health. All body systems involved in either physical or mental health do not function well without sleep.
- Sleep is important for the body to rest and repair its systems.
- Sleep happens in two stages, non Rapid Eye Movement (non-REM) sleep and REM sleep.
- Non-REM sleep occurs in four stages and is vital to get the body systems rested, this process is called homeostasis. A growth hormone is also produced during non-REM sleep, which causes children to grow and develop.
- REM sleep allows us to dream and studies have shown that dreaming allows us to learn. People who don't dream or get REM sleep will not learn as efficiently.



### EFFECTS OF SLEEP DEPRIVATION

Sleep deprivation may affect the following areas:

- Physiological/Physical health (cardiovascular and endocrine systems).
- Psychological (emotional and mental health).
- Psychosocial (behaviour, peer relations, family relationships).
- Cognitive (learning, attention, problem solving).



### 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 7-8 so they are in 'sleep debt'.



### POSSIBLE REASONS FOR DISRUPTED SLEEP PATTERNS IN YOUNG PEOPLE

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

During adolescence there is a delay in the time when melatonin (one of the hormones which makes us sleepy) is released from our brains to our bodies. This may mean that adolescents are not tired until later in the evening and may then find it hard to get up in the morning.

#### 2. Social changes and pressures

Adolescents have a lot going on in their lives (phone, TV, jobs, social activities, school, sports, more homework, worry). Sleep is sometimes low on the priority list and is often given up for these other things.



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## PHYSICAL EFFECTS OF SLEEP DEPRIVATION

- An increase in accidents, resulting from clumsiness.
- Increase in obesity; lack of sleep mixes up your appetite hormones so you feel hungry when you shouldn't.
- Sickness; the immune system cannot be repaired and rested, resulting in decreased efficiency.



## PSYCHOLOGICAL EFFECTS OF SLEEP DEPRIVATION

- Depression
- Anxiety
- Mood swings and changes
- Increase in frustration
- Decreased ability to concentrate resulting in the decreased ability to learn



## TECHNIQUES TO IMPROVE SLEEP

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

This can be addressed by talking with a mental health professional, school counsellor or even a good friend. Relaxation and exercise are excellent ways of learning to relax the mind and the body so sleep is easier. Routine is important – going to bed and waking at the same time every day helps establish a pattern.

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

Are they sick? If so, it is important to see a health professional.

There are other physiological reasons for poor sleep – it is worth speaking to a health professional if other factors have been ruled out.

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

Is the room too dark or light or noisy or hot?

Have they had too much coffee/energy drinks throughout the day?

Avoid heavy exercise three hours prior to bed.

Turn off all screens at least 30 minutes prior to sleep.



## SLEEP DEPRIVATION AND SCHOOL BEHAVIOUR

The prefrontal cortex is an area in the brain that controls important tools in the body that affect learning.

This particular part of the brain needs lots of sleep to function efficiently. When the prefrontal cortex is affected by a loss of sleep, people can find it difficult to:

- regulate learning
- regulate emotions and behaviour
- remember or concentrate on information
- plan ahead.

These effects are cumulative, meaning that a person will not just suffer from one effect of sleep deprivation, they will all pile up, decreasing their knowledge base.

If learning becomes difficult due to lack of sleep a young person may become frustrated and lose motivation to continue.

### Sources

This information has been adapted from Dr Sarah Blunden's *Adolescent Sleep Facts Sheet*, [sleepeducation.net.au/Docs/Adolescent's%20Sleep%20Facts%20Sheet.pdf](http://sleepeducation.net.au/Docs/Adolescent's%20Sleep%20Facts%20Sheet.pdf)