

### A Good Night's Sleep

*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*

We all lead such busy and demanding lives that result in many of us experiencing disturbed or insufficient sleep. Our early starts and late finishes often savagely erode our opportunities to rest and recuperate. With the Olympic Games presently in full swing in Rio I am certainly aware of some trying to capture events telecast live well into the night. Some of our boys also fail to manage their use of social media appropriately leading to sleep deprivation.

Sleep is a behavioural state that plays a vital role in human function and is particularly important for growing adolescent boys. It offers the body a chance to rest and recuperate affording opportunity to dedicate energy to the immune and nervous systems as well as our muscles and bones. Sleep is often thought to conserve energy; however, research demonstrates it only decreases metabolism by 5-10%.

But there is more to the function of sleep than body repair. Sleep experiments have revealed that sleep deprivation measurably impairs speech, memory and problem solving skills. Sleep plays an important role in our brain development and performance.

Shakespeare referred to sleep as the '*chief nourisher in life's feast*'.

DH Lawrence wrote:

*And if tonight my soul may find her peace  
in sleep, and sink in good oblivion,  
and in the morning wake like a new-opened flower  
then I have been dipped again in God, and new-created.*

Sleep plays an essential role in our lives, just like food and water, and unfortunately many of us do not get the daily amount required to lead happy and highly productive lives. Consensus exists among sleep research scientists that adolescents require 9½ hours sleep per night and that one of the biggest problems our teenagers face is they are the most sleep-deprived segment of the population.

As parents of teenage boys, you are well aware of the many changes your son experiences with the onset of puberty. One of these is a great desire to sleep in when opportunity avails. This is not a result of laziness or idleness, but due to their changing biology, lurking deep within their brains. Adolescents' natural circadian rhythm is disturbed, causing them to experience a delay in the onset of sleep, probably due to the later release of melatonin. When our teenagers tell us that they are not tired in the evenings, they are probably telling the truth. Another biological change is simply that teenagers require more sleep – between 9 and 10 hours each night.

Adolescent Psychologist, Michael Carr-Gregg, argues “We need to take the whole issue of sleep as one of the most important issues. When it comes to setting boundaries, we need to fight over things that matter and that’s generally stuff that relates to their wellbeing.”

### **What are the Consequences of Insufficient Sleep?**

- Decreased motivation
- Sleepiness during the day
- Irritability and low tolerance
- Difficulties in focusing attention
- Difficulties with self-control
- Direct effects on learning, memory consolidation

### **Sleep is Important for Learning**

- Consolidate what has been learned
- Prepares brain to take in new information
- Learn new tasks faster
- Retain newly learned information

### **Some Secrets of a Good Night’s Sleep**

- Dim lights/implement a routine
- Cool down
- Avoid naps
- Minimise anxiety
- Avoid stimulants in the evening such as caffeinated sodas, tea and coffee, and chocolate
- Warm and soothing drinks
- Keep regular hours – try to go to bed at the same time and get up at the same time each day. Getting up at the same time is most important. Getting a bright light, like the sun, is also helpful in the morning.

Sufficient sleep is essential in order to reach your maximum mental and physical performance. It is a challenge to balance one’s activities to be able to achieve such a goal and effective time management will give us the greatest chance to achieve such an important goal.

### **Some Facts about Sleep you probably didn’t know:**

- The record for the longest period without sleep is 18 days, 21 hours, 40 minutes during a rocking chair marathon. The record holder reported hallucinations, paranoia, blurred vision, slurred speech and memory and concentration lapses.
- It’s impossible to tell if someone is really awake without close medical supervision. People can take cat naps with their eyes open without even being aware of it (often reported by teachers of Years 9 and 10).

- A new baby typically results in 400-750 hours lost sleep for parents in the first year.
- Some scientists believe we dream to fix experiences in long-term memory, that is, we dream about things worth remembering. Others reckon we dream about things worth forgetting – to eliminate overlapping memories that would otherwise clog up our brains.
- Dreams may not serve any purpose at all, but be merely a meaningless by-product of two evolutionary adaptations – sleep and consciousness.
- British Ministry of Defence researchers have been able to reset soldiers' body clocks so they can go without sleep for up to 36 hours. Tiny optical fibres embedded in special spectacles project a ring of bright white light (with a spectrum identical to a sunrise) around the edge of soldiers' retinas, fooling them into thinking they have just woken up. The system was first used on US pilots during the bombing of Kosovo.
- Seventeen hours of sustained wakefulness leads to a decrease in performance equivalent to a blood alcohol-level of 0.05%.
- The 1989 Exxon Valdez oil spill off Alaska, the Challenger space shuttle disaster and the Chernobyl nuclear accident have all been attributed to human errors in which sleep-deprivation played a role.
- The NRMA estimates fatigue is involved in 1 in 6 fatal road accidents.
- The "natural alarm clock" which enables some people to wake up more or less when they want to, is caused by a burst of the stress hormone adrenocorticotropin. Researchers say this reflects an unconscious anticipation of the stress of waking up.
- To drop off we must cool off; body temperature and the brain's sleep-wake cycle are closely linked. That's why hot summer nights can cause a restless sleep. The blood flow mechanism that transfers core body heat to the skin works best between 18 and 30 degrees. But later in life, the comfort zone shrinks to between 23 and 25 degrees – one reason why older people have more sleep disorders.
- Humans sleep on average around three hours less than other primates like chimps, rhesus monkeys, squirrel monkeys and baboons, all of whom sleep for 10 hours.
- Feeling tired can feel normal after a short time. Those deliberately deprived of sleep for research initially noticed greatly the effects on their alertness, mood and physical performance, but the awareness dropped off after the first few days.
- Experts say one of the most alluring sleep distractions is the 24 hour accessibility of the internet.

*We are such stuff  
As dreams are made on, and our little life  
Is rounded with a sleep.*

William Shakespeare, *The Tempest*