SLEEP MATTERS
With Lucy Wolfe

The importance of sleep for our teenagers

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Becoming a teenager

The crucial process in the teenage years is about starting to become your own person. It is about becoming independent; it is about taking responsibility for yourself and your own actions; it is about finding the safety to be true to yourself and to be real and authentic.

As parents, our continued task is to provide a psychologically safe, warm responsive, attentive family culture with unconditional loving responses, boundaries and understanding whilst we host this amazing process, that is not without challenges.

The challenges are primarily concerned with our children finding their own particular way of open and real expression to the several aspects of themselves-from emotional, physical, behavioural, intellectual, social, sexual and creative.

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All about sleep

Sleep is necessary to ensure that we are optimally functioning-sleep is not just rest; whilst sleeping our brain and body is repairing and restoring, supervising a wide variety of biological maintenance jobs that support our immunity, muscle growth, emotions and brain processing ensuring that we and our children can function at an optimum level by day and live a nourishing and healthy life.

Without adequate sleep, there is a burden on our children's health and wellbeing.

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The burden of	chronic sleep loss in teens
Cognitive and behavioural consequences	Poor judgement, lack of motivation, inattention, decision making
Influence on mood	Vulnerable to depressive symptoms. There is an associated link between sleep loss and suicidality in adolescents
Increased overweight/obesity risk	The body of evidence from studies assessing the relationship between short sleep and obesity is compelling and has far reaching implications.
Drowsy driving accidents	At risk, young inexperienced drivers, with a large percentage admitting to driving whilst sleep impaired is clearly linked to increase in crashes and near misses

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How much sleep do we need?

Age	Amount
4-12 months	12-15hours*
1-2 years	11-14 hours*
3-5 years	10-14 hours*
6-12 years	9-11 hours
12- 18 years	8-10 hours
18-64 years	7-9 hours
64 years +	7-8 hours

Source: Hirshkowitz, M. et al., 2015

***Including Day Sleep**

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Types of sleep

Sleep itself, is categorised into two main stages: rapid eye movement REM sleep and non-rapid eye movement NREM sleep and this has own three main stages that I outline below. Overnight, the brain transitions through these stages approximately every 90 minutes cycling through drowsiness, to light and dream sleep and into more deep sleep again.

We all transition through 4 stages of sleep. NREM and REM Sleep

NREM

Stage1- eyes closed, on the threshold between awake and asleep. You can be easily awakened, you may jerk (myoclonic jerk). Stage 2 This is light sleep, your heart rate begins to slow and body temp goes down. Stage 3 Slow wave sleep, now you are in deep sleep. Blood pressure and heart rate go down, and your breathing slows. It is harder to wake you up. A lot of deep sleep happens in the first part of the night.

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REM- approximately 90 minutes after falling asleep, your brain becomes active, but voluntary muscle movements are inhibited. Brain wave are faster and less organised that in non-REM and the eyes scan back and forth under the lids. REM is the stage in which dreams occur. As the night progresses you experience more REM sleep

Sleep cycles

•Each sleep cycle is about 90 minutes. As each person starts to cycle through the sleep stages NREM &REM, they will have a partial arousals between each sleep phase.

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The two processes that regulate sleep

Falling asleep, staying asleep, are all rooted in your child's biology. Just like language or motor skills, sleep matures over the first years of your child's life. The onset of puberty is linked with changes to how our teens experience their sleep.

As your child grows, two main processes begin to regulate sleep. The homeostatic sleep drive and the circadian system.

The **homeostatic sleep drive** is like pressure that builds the longer you are awake, and then releases when you sleep.

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The circadian rhythm and internal clock

The other system regulating sleep begins with a powerful internal clock nestled in the brain. This clock is a biological pacemaker that controls the circadian rhythm allowing us to initiate the light and dark pattern of day and night. The internal clock sends messages through the 24-hour day influencing our wake patterns and many other biological processes. As bedtime approaches, our temperature begins to go down, and levels of the sleep-inducing chemical melatonin rises in preparation for sleep. Toward morning time, the activating cortisol rises alerting the body to awaken.

Theoretically, the alignment of these two processes predicts maintenance of wakefulness and alertness during the daytime and maintenance of sleep at night. The ideal balance between systems is challenged during adolescence as both processes show development changes and behavioural demands and choices further alter the balance.

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Developmental changes and psychosocial influences on sleep in adolescence

Sleep-wake behaviour changes across adolescence are the product of changing regulatory sleep mechanisms and evolving psychosocial factors.

A hallmark behavioural change is bedtime getting later-the onset of puberty has been linked to this.

Parent-set bedtimes also become less common, staying up later to study, train, spend time on electronic media for example contribute to later bedtimes- recent reports demonstrate that 70-88% spend time on social media sites daily.

Studies also reflect that light from media screens may also delay the circadian system and increased alertness; further exacerbated by the already delayed circadian system of teens and reduce the amount of sleep achieved.

Later bedtimes and necessary early wake times governed by school start times potentially reduces sleep opportunity for the average teenager.

It is not clear whether the sleep loss during the week can be recovered during the weekend- with some able to recover some sleep and others not and with a typical later bedtime due to the weekend, we are continually adding to the sleep debt.

Changes to weekday versus weekend sleep results is sleep irregularity for many and further adds to the reported sleep issues.

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Common sleep issues:

- ✓ Trouble falling asleep
- ✓ Not being able to switch off
- ✓ Waking up at night
- ✓ Restless sleep
- ✓ Not feeling well-rested

Often in this cohort- the issues are parent/teacher reported rather than from the young person as they may not truly realise how sleep loss and their relationship with sleep is affecting their being, thoughts, appetite, feelings and behaviours.

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The relationships that influence sleep

As well as biological factors and their emerging chronotype that influences their sleep patterns, their ongoing understanding and relationship with sleep, with their parent, and with themselves and their peers has a significant impact.

The relationship with the sleep environment, their activity, their food and drink choices; and the example that we are showing them too; all can influence their sleep tendency. At this age now, peers have a significant influence on all aspects of self and fear of missing out stimulates an inherent need to belong at any cost.

Further considerations must include underlying medical issues such as food sensitivities and intolerances, lung problems e.g. cough, asthma, upper airway problems e.g. sleep apnoea/sleep disordered breathing, skin problems e.g. eczema. dental problems e.g. cavities/irritated gums, neurobiological problems e.g. headaches, seizures, restless leg syndrome, pain e.g. ear infections or internal pain

….all can affect your sleep and it is advised to consult with your GP/Dental Practitioner

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The relationship with the sleep environment

Needs to be the coolest room in the house to help initiate sleep hormone production

Invest in quality mattress and bedding that they appreciate the feel and texture of

Consider a pillow that fits the space between the head and the shoulder

Invest in comfortable sleep clothing; always get changed for bed

Avoid falling asleep anywhere other than the bed itself

Unclutter the room; clean, air and vacuum regularly

Avoid using the bed for anything other than sleep- when possible create a distincition between the study/hang out area

Suggested to use blackout blinds and curtains and avoid hall and bathroom lights and if using a night light, not in the eyeline in the room

Consider an eye mask to help further

Eliminate loud or sudden noises with white noise as a barrier to unwanted disturbances-leave on for sleep period

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The relationship to activity

Together with your child discuss the importance and value of sleep, explore this as a topic and gather their unique insights. Identify key areas of interest to help motivate them: academia, sports, image, and link that with the importance of sleep.

As you navigate this topic, agree and commit to a suitable bedtime- considerations will include when they feel tired and what time they must be awake at and how much sleep they require. Do a backward calculation from the necessary wake time and their sleep need.

Help them to understand and review the importance of regularity and how what we do and when we do it can help or hinder how we experience sleep.

Encourage them to commit to the same bedtime and wake-time every day-7 days a week-variation ideally not more than 1 hour and not at all if falling asleep and maintaining sleep continues to be a concern- perhaps allocate 1 month to implement this and see how it may shape their sleep profile- keep a sleep diary to understand this more

In the morning, avoid the snooze button, get up and start the day: encourage a post-sleep ritual, avoid being rushed or stressed before leaving the house- remembering to connect at those key times in the morning and evening

Initiate exposure to bright and natural light especially in the morning

Ensure plenty of outdoor activity throughout the day, when possible expose to natural light, as the evening unfolds use dimmed lights to encourage the production of sleep hormone melatonin

Avoid training/exercise 2-3 hours before bedtime when possible

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The relationship with food and drink

Support them to eat and drink at the same times every day. Do try to encourage breakfast to regulate blood sugar levels and kick start the metabolism

Be mindful that caffeinated products, alcohol, high sugar, refined carbohydrates and nicotine can act a stimulant and deeply impact our sleep onset, maintenance and sleep totals

Caffeine for example takes 3-7 hours to eliminate from the system and longer depending on intake levels- avoid entirely if possible and specifically in the afternoon and evening setting- be mindful of over the counter medication that contains caffeine as well as popular energy drinks

Avoid heavy meals 2-3 hours before bedtime, but don't go to bed hungry consider a sleep promoting light supper. Banana, wholemeal, oatmeal, dairy, honey, some nuts and seeds all have sleep promoting qualities.

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The relationship with electronic media and screens

The national sleep foundation poll found that adolescents with less than 4 media devices in the bedroom got significantly less sleep on both school and non school nights, were more likely to fall asleep at school or while doing homework and drank more caffeinated products too. On the other hand adolescents who reported getting more than 8 hours sleep per night engaged in less technology related activities after 9pm compared with their peers who report getting less sleep. Another recent study found that children who slept with a small screen in the bed or next to their bed get 20m less per night and children with a television in their bedroom get 18m less sleep.

Type and timing of devise is increased mobile phone use by day has shown in some cases to impact sleep negatively and increase daytime sleepiness.

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The relationship with electronic media and screens

Suggested to avoid TV and electronics an hour or more before bedtime- set a loving boundary about this – deep and open conversations are required and parents setting an example too can be helpful, alongside keeping electronics out of the bedroom after a certain time.

When we create digital boundary it is sensible to replace this activity with an other activity that serves to calm and relax- parent time and connection is nearly always welcome and certainly encouraged.

Preparing for bedtime ideally commences 1-1.5 hours before your set bedtime/allocated lights out- allowing for 30m-1 hour of relaxing activity outside of the bedroom and 20-30 minutes in the bedroom itself before lights out.

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Suggested calming activities- 30m-1 hour of so before the bedtime routine begins- can be done solo or with the parent (s) and other family members

- Listening to music
- Reading
- Wordsearch
- Crosswords
- Drawing
- Colouring
- Puzzles
- Jigsaws
- Family time
- Gentle stretches
- Yoga
- Meditation

It is the deep-seated need for each child to feel seen, heard, loved, safe, secure and belonging to the holding world of family. It is important that we are creating a loving, attentive, warm, responsive family culture that honours your child's individuality. Children of all ages flourish with their parents loving presence- ensure that we are spending lots of one to one, connected time with each of our children-nothing to do with sleep- with plenty of dialogue, eye contact, meaningful presence and physical touch. Practise active listening and being wholly available to them and try your best not to be distracted by modern life such as phones when we are with them.

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The bedtime routine

Ideally in the bedroom where your child will sleep following preparation such as teeth, makeup removal, bath or shower; 20-30 minutes before they anticipate “lights out”

Encourage the same ritual each night either with or without parent based on what fits your family; limit the bedroom activities to 3-6 items e.g. chats, reading, relaxation/ breathing exercises, visualisations, meditation.

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The relationship to thoughts, feelings, worry and concerns that may arise

Reports of stress and anxiety make up more than 40% of the sleep issues experienced. Unwanted thoughts and feelings flood the mind increasing adrenaline encouraging a fight , flight or freeze mode that makes going and/or returning to sleep very challenging. The more each individual tries not to worry or think about certain things, the harder we try to go to sleep: the more elusive it becomes, creating a cycle of tension, psychologically between the person and their sleep.

To address a cycle of tension, it is necessary first to establish the root of the issues and to see the meaning and metaphor of what is showing up. It may be helpful to seek professional guidance to help your young person and you, to better understand what is causing the anxiety in the first place. Uncovering the true source of what lies hidden, increases understanding and will help them further on their journey to realness and authenticity. All behaviour makes sense and represents an action for self.

Journaling has shown to be a helpful way to reflect and work through what is arising for the individual. Incidentally, keeping a sleep diary also can help you identify vulnerable areas too.

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Breathing Awareness Exercise

- Lie down on your back with your arms relaxed by your sides. Take a few seconds to get comfortable.
- Bring your awareness to your breathing. Can you feel your breath coming in and going out?
- There's no right way to breathe. Just relax and breathe normally.
- Try to imagine the air is coming from far away, and you blow it out to a distant place.
- You might also say the words 'in' and 'out' in your mind to match your breathing. Or perhaps think of the word 'relax' on each out breath.
- Concentrate on your chest rising and falling – can you feel it? few minutes or until you feel too sleepy to continue.

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- Can you taste or smell the air as you breathe in? Is it cool or warm?
- Your mind will probably wander at some point, and thoughts may arise.
- Don't worry if you have thoughts. Acknowledge them, and then gently bring your focus back to your breathing.
- As you continue breathing, feel your body gently sink into your mattress little by little.
- You can do this breathing exercise any time you feel the need to during the day. Just 5 minutes can help, but you might like to build up to 20 minutes over time.
- And if you do it in bed, you can either do if it for a few minutes or until you feel too sleepy to continue.

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Body Scan Exercise

- Lie down and get yourself comfortable.
- Imagine your mind leaving your head, and travelling through your body to one of your feet.
- How does your foot feel? Is it relaxed, tense or sore? Is it hot or cold?
- Don't make any judgments on how it feels – simply scan and observe how you feel.
- Imagine your toe and foot muscles tightening, and relaxing again.
- Then take your mind up to your calf, knee and thigh.
- Stop in each body part to repeat the scanning, muscle tensing and relaxing.
- Repeat the exercise with your other leg.
- Move to a hand and work your way up both arms.
- Scan, tense and relax your back, stomach, chest, shoulders and face.
- You can either imagine your muscles tensing and relaxing, or physically tense and relax them – do what feels best.
- You'll know it's starting to work when your limbs begin to feel heavy and you're happy to sink comfortably into your mattress.
- You might find your mind wanders at times. Acknowledge any thoughts that arise in a positive way, but bring your mind gently back to the exercise.
- Combining these two exercises can be even better – try doing one followed by the other.

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Additionally:

Once in bed- focus on breathing and/or body scan exercises. Be careful about listening to music and be mindful that whatever happens as we fall asleep needs to be constant through the night to avoid the brain not feeling safe.

If you wake up; avoid getting up and doing something-this may only train you to wake.

If you need to use the bathroom try to do so without turning on lights.

Rest if you cannot sleep.

Read or listen to music as you did at bedtime pick your reading and music material with sleep in mind!

Encouraged not to focus on time or amounts of sleep just focus on being present, mindful and on your breathing as outlined.

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Natural suggestions to support sleep, rest and relaxation

Magnesium spray

Epsom salt bath

Essential Oils: chamomile, lavender , camphor, vetiver, chamomile

-diffuser, candles, body lotion, bed and body spray

Chamomile/Lavender Tea

Salt therapy Air Purifier-good for sinus, snoring, asthma etc

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Supporting our teens

Parents can assist this process by reflecting on their own sense of self.

Express unconditional love.

Have open communication that allow the adolescent to come to their own decisions with our support.

Actively listen; with your mind, body, heart and soul without interruption.

To be present and open to difference of opinions; to value and respect their opinions.

Continue to find ways of getting to know them.

Express belief in their capacity.

Be specific – providing positive feedback for particular efforts to be responsible and challenging actions that threaten their wellbeing and that of another.

Stay emotionally present- at key times, morning, mealtimes, bedtimes- critical to developing a strong sense of self.

Be open about your own thoughts, feelings and experiences.

Create natural opportunities for engagement.

Communicate for a place of “I” rather than a place of You.

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Initiating change can be hard for any household, huge competition of needs exist within busy households, coupled with social, study and extra curricular demands. Understanding that for teenagers a perfect storm erupts within. Collaborate, attune, problem solve and resolve together and make the changes, one step at a time. Being mindful of all the force factors that influence and impact their sleep and their evolving sense of self.

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