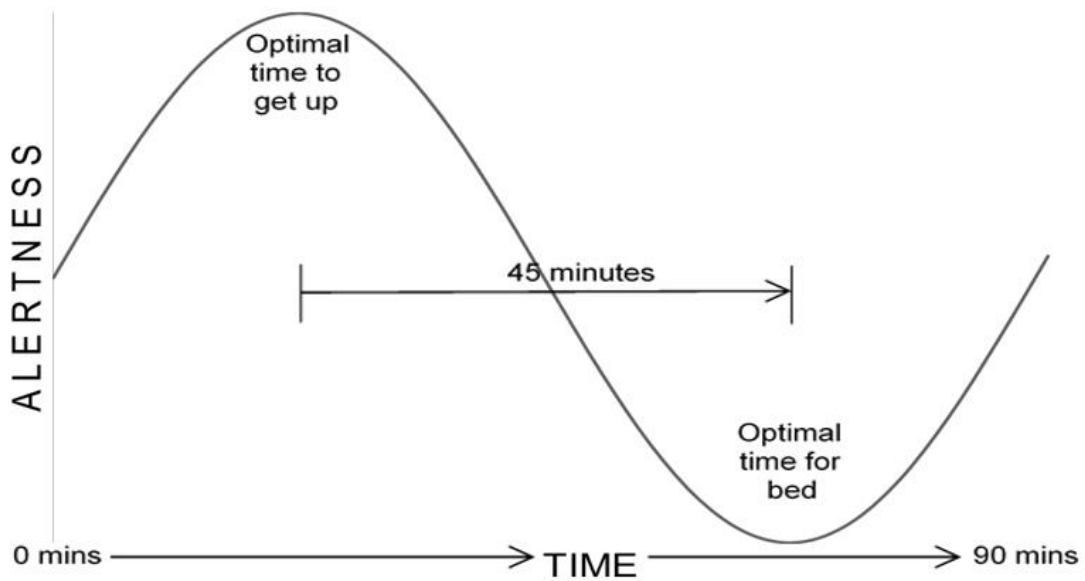


## Sleep/Wake Cycles



- There is a clock inside our brains, which operates continuously and without our conscious awareness, controlling a whole range of our physiological functions. Adult humans have a sleep/wake function often referred to as the 'ultradian rhythm' which runs throughout the day in a 90 minute rhythm – this is very regular and is generally very predictable.
- Here are a couple of practical examples that help explain: We are all familiar with a drop in alertness just after lunchtime, and another before bed, at these times our alertness is at its lowest, as the ultradian rhythm is reaching a minimum, and it is here when we can easily initiate sleep. If we wait half an hour though, our alertness is rising and we begin to reach a peak again, this tends to cause difficulties in sleep initiation. This is why when you shift your bedtime from its normal time its often difficult to fall asleep.
- For managing sleep problems, knowledge of the ultradian rhythm can be particularly useful. If you're having trouble getting off to sleep, then this may be because you are attempting to do so at a peak, rather than a dip. Noticing when you're yawning early in the evening can allow for a quite accurate calculation of a bedtime that 'catches' a dip. If you're yawning at, say, 20:30, then you are likely to be 'dipping.' The next dip would be 90 minutes after this time, i.e. 22:00, and the next at 23:30, so preparing for bed, either at 21:45, or 23:15 so that you're ready, in bed, for sleep at 22:00 or 23:30, then this can optimise the chances of catching a 'dip' and getting off to sleep quickly.
- Upon waking in the night, it is likely that you will be waking up at a peak in your ultradian rhythm. If you noticed yourself worrying about getting back off, this cognitive stimulation can often lead to alertness, it may be 45 minutes until you reach another dip. Leave the room alone (to reduce the association between the bedroom and worrying) and engage in a non-stimulating activity, avoiding liquids, food or digital devices (example; reading the yellow pages or another boring book, nothing too exciting). Do not return to bed until sleepy, an indication of this would be yawning.
- Additionally, If you want to shift your bedtime from its usual time then you need to move it by 90 minutes to catch the preceding or succeeding, circadian dip.

## Sleep Hygiene



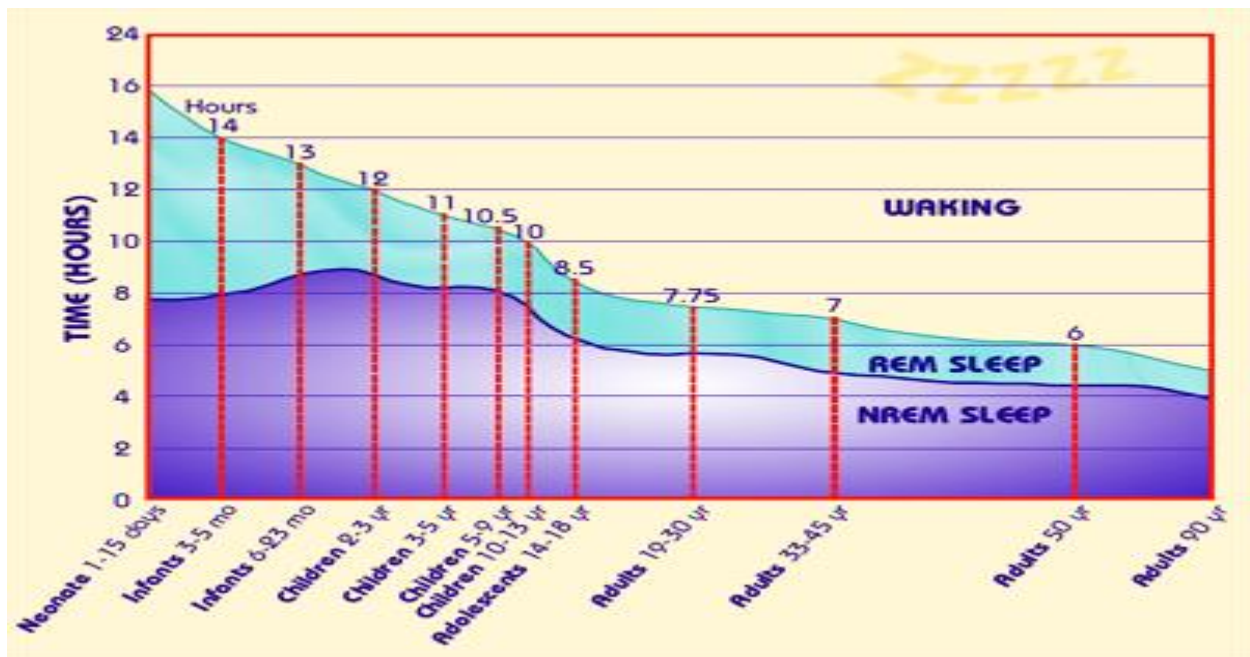
### DO'S

- Maintaining consistent bed time and wake time (see graph on page 3 for average amount of sleep for your age).
- If on going to bed at the chosen time, sleep does not come within 30 minutes then it is advised that you leave the bedroom and engage in a non-stimulating activity (avoiding electronic devices & liquid/food consumption) and do not return to bed until sleepy.
- Again, if on waking on the night, sleep does not return in 30 minutes then it is advised that you leave the bedroom and engage in a non-stimulating activity (avoiding electronic devices & liquid/food consumption)
- Get a comfortable bed with seasonably appropriate bedding (to preserve a comfortable temperature)
- Restrict fluid consumption in the evenings
- Avoid caffeine too late into the day.
- Pacing of day time activity.
- Exercise regularly ending before 9pm
- Get regular exposure to outdoor lights, the sunlight exposure helps promote a better night sleep
- Keep bedroom dark
- Keep bedroom quiet
- Remove electronic devices from bedroom as these can increase stimulation without you realising and keep you awake.
- Use relaxation techniques at a time in the day and repeat at night if needed such as; autogenic training, deep breathing, guided imagery & progressive muscle relaxation.



### DON'TS

- Exercise just before going to bed.
- Engage in a stimulating activity just before bed (e.g playing computer game or watching exciting programme on TV).
- Have alcohol in the evening or use it to sleep. (alcohol is a stimulant and although it can make you drowsy and fall asleep quicker you will not have a good quality sleep and it will increase likelihood of disturbed sleep).
- Have caffeine in evening (e.g. chocolate, fizzy pop, tea or coffee).
- Smoke before bed – nicotine is a stimulant and will keep you awake.
- Read or watch television in bed – the bedroom must be used only for sleep and sex.
- Go to bed too hungry or full.
- Do not nap in the day to consolidate sleep into the night. By napping during the day, this borrows sleep from the night making it difficult to maintain or initiate sleep.
- Do not command yourself to go to sleep or clock watch, this can lead to cognitive stimulation making you more alert.



Above is average appropriate sleep time for a person of particular ages.

## What Influences the Quality & Length of Sleep?

Caffeinated drinks such as coffee and drugs stimulate some parts of the brain and can cause *insomnia*, or an inability to sleep. Many antidepressants suppress REM sleep. Heavy smokers often sleep very lightly and have reduced amounts of REM sleep. They also tend to wake up after 3 or 4 hours of sleep due to nicotine withdrawal. Many people who suffer from sleep problems try to solve the problem with alcohol – the so-called night cap. While alcohol does help people fall into light sleep, it also robs them of REM and the deeper, more restorative stages of sleep. Instead, it keeps them in the lighter stages of sleep, from which they can be awakened easily.

People lose some of the ability to regulate their body temperature during REM, so abnormally hot or cold temperatures in the environment can disrupt this stage of sleep. If our REM sleep is disrupted one night, our bodies don't follow the normal sleep cycle progression the next time we doze off. Instead, we often slip directly into REM sleep and go through extended periods of REM until we "catch up" on this stage of sleep.

**Worry at night:** An idea might be to keep a gratitude diary and write down 3 things that you were grateful for that day, this could be something small for example; a nice song came on the radio or something big; you praised at work! Then review these at night and focus on positive things like this which may help to get you to sleep.

When worrying in bed, try to refocus on your breathing, place your hand on your stomach and notice the sensation of your stomach rising and dropping saying 'up and down' in your head to refocus away from worries. This enables us to pull our focus away from our thoughts in our mind and into the present moment back into the task at hand (sleeping) changing our focus from internal to bringing it back to the external. If these worries are reoccurring practical issues try problem solving these during the day and not too close to bedtime.

## Problem Solving Worksheet

Step 1	Identify the Problem Break it down into smaller steps and decide what you need to action first
Step 2	Brainstorm and write down as many ideas as you can that might help solve the problem, no matter how silly they seem – don't dismiss any possible solutions.
Step 3	Consider the pros and cons of each possible solution, using a separate piece of paper.
Step 4	Choose one of the possible solutions that looks likely to work, based on the advantages and disadvantages
Step 5	Plan out step-by-step what you need to do to carry out this solution. What? When? How? With whom or what? What could cause problems? How can you get around those problems? Is this realistic and achievable?
Step 6	Do it! Carry out the plan
Step 7	Review how it went. Was it helpful? Did you achieve what you set out to achieve? If not, how could you have done it differently? Did you achieve any progress, however small, towards your goal? What have you learned?
Step 8	If you achieved your goal – consider tackling the next step of your original problem.  If you didn't fully achieve your goal – make adjustments to your chosen solution, or return to steps 3 and 4 and choose another possible solution.