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Sleep Across The Life Span

How much sleep do I need?

- ▶ How often have you heard or read the advice “you should get 8 hours of sleep at night” as if we all required the same amount of sleep? Many things determine how much sleep will satisfy our individual needs for sleep.
- ▶ Sleep need varies between individuals just as other physical characteristics such as height and hair colour. Some people need only 6 hours sleep to feel fine during the day, however someone else may need 9 hours.
- ▶ Also there are normal changes to sleep as we age just as there are in other biological respects such as the decrease in resting metabolic rate, resilience of skin, and hair colour. Amount of sleep changes across our life time reducing from about 16 hours at birth, to 10 hours in children, 9 hours in adolescence, about 8 hours in early adulthood and 6-7 hours in older people.
- ▶ Our sleep, to some extent, is flexible and responds to the demands and obligations in our lives and this may vary from time to time. During busy periods sleep is likely to be shorter but without noticeable detriment to our productivity during the day.
- ▶ Are you getting enough sleep? The best guide is how you feel and function during the day. If that is good, then even if your sleep is shorter than average or interrupted with awakenings, your sleep is adequate and you do not have insomnia. However, if you are having regular difficulty getting to sleep or with long nocturnal awakenings and you experience daytime impairments such as fatigue, irritability, mild depression, or memory difficulties, then you are experiencing insomnia.

Sleep in adolescents

- ▶ Research suggests that adolescents need 9 hours sleep on average. However, anyone with a teenager in the household knows that they rarely get that amount of sleep, especially on a school night.
- ▶ Adolescents typically experience changes to their sleep and waking patterns that can cause problems. They tend to become more ‘evening types’, usually going to bed at least 2 hours later than pre-adolescents. During the school week when they have to wake early, they typi-

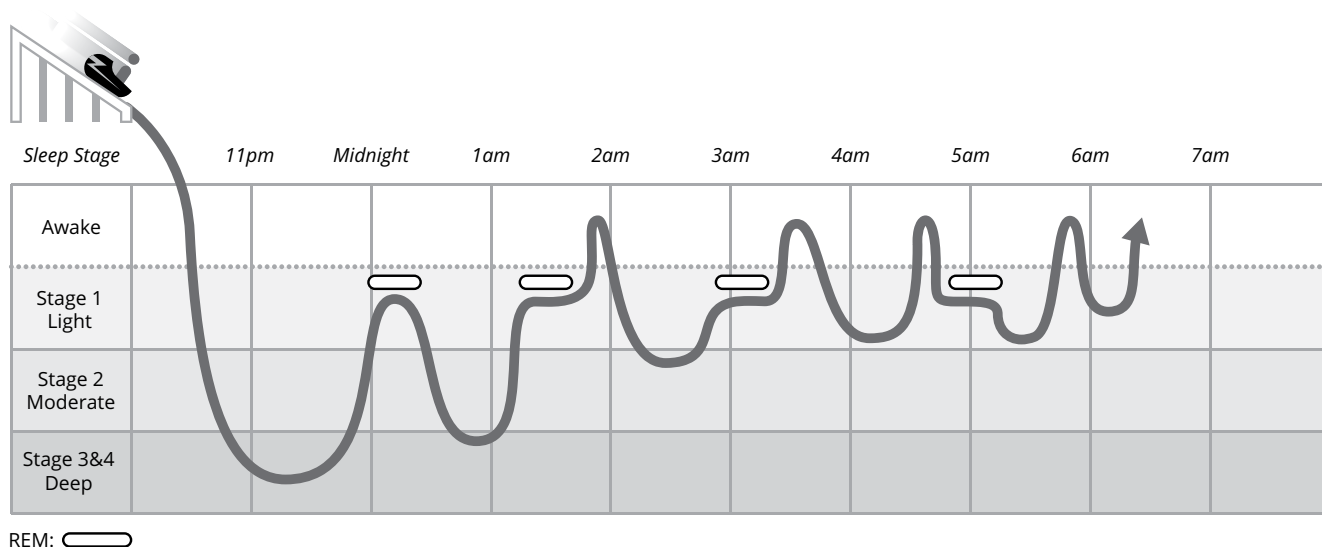
cally get an insufficient 7 hours sleep. It is difficult to get then up in the morning, and they can feel very sleepy until mid-morning. To catch up on this lost sleep, teenagers often sleep-in late on weekends. However, this practice actually causes a further delay of their sleep pattern that will then lead to more difficulty falling asleep at night and feeling sleepy in the morning.

- ▶ These changes may be partly biological. It is suggested by some researchers that during adolescence the body clock stretches out in time leading to a tendency to not feel sleepy until later at night and thus delay bedtime. With a fixed wake-up time for school or work, sleep is lost and increasing daytime tiredness results. This can have detrimental effects on learning and healthy personality development.
- ▶ Other contributing factors to reduced sleep are increased academic and social pressures. Teenagers have more homework and perhaps after-hours sport or even part-time work competing for their time. Also they are very likely to have electronic devices (smart phones, tablets, computers) that keep them occupied on the internet with social networks and computer games in their bedroom that are often used late into the night. Today's teenagers have historically record levels of demands and attractions competing for their time against their need for sleep. Chapters 7, 9, 11 and 12 are relevant to this problem.

Sleep in the older person

- ▶ It has recently been scientifically confirmed that the need for sleep in healthy individuals declines with age. Between the age of 20 and 70 years the sleep normally obtained by healthy, active people declines from an average of 8 hours to 6.5 hours. Therefore, sleep need drops about one and a half hours across this age range with no detrimental effect in the older age group.
- ▶ Besides changes in the amount of sleep that an older person needs, there are also changes in their sleep pattern. As you can see from the diagram below, deep sleep reduces as we get older. At the same time there are increases in light sleep stages and this tends to produce more and longer awakenings. Therefore, awakenings are a normal part of the older person's sleep pattern.
- ▶ Many older people also have an early-timed body clock. That is, they can feel very sleepy in the early evening and may doze off in front of the television. When they finally go to bed they fall asleep quickly. However with an early timed body clock there is an early timed morning awake zone that may start as early as 4 a.m. This can wake them too early without getting sufficient sleep. (See the diagram for Early Timed Body Clock in Chapter 4).
- ▶ If older people are not aware that these changes are normal, they can worry and become anxious, and this anxiety can actually lead to insomnia. The prevalence of insomnia and the use of sleeping pills is greater in the older population. This may be partly due to the misun-

derstanding of the normal changes of sleep with aging. Therefore, a better understanding of the normal sleep pattern of healthy older people could help to reduce insomnia and drug use.



The typical sleep pattern of a normal, healthy older adult.

Menopause and sleep

Large surveys show that up to 64% of menopausal and postmenopausal women have poor quality sleep. Their main sleep problems are difficulty initially falling asleep and night-time awakenings. The awakenings may be often associated with hot flushes. Although these may be uncomfortable, most of them last only a short time. However, any regular disturbances from sleep, including those associated with hot flushes, can lead to the development of insomnia that prolongs the difficulty getting back to sleep. Chapters 9 and 10 will be helpful in this case. Menopause may also be associated with snoring and daytime sleepiness – symptoms of Sleep Apnoea (refer to Chapter 16).

❓ Questions?

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<http://re-timer.com>