

Learn Sleep!
An Introduction to Cognitive
Behavioural Therapy for Insomnia

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## Content

1. Introduction to Sleep



2. Sleep and ageing



3. Sleep architecture



4. The effect of light







5. Sleep pressure



6. The Circadian Rhythm



7. Psychobehavioural interventions



## Without adequate sleep we can become:

- Tired
- Anxious
- Irritable
- Depressed
- Less able to learn and recall skills and information
- More likely to have persistent insomnia



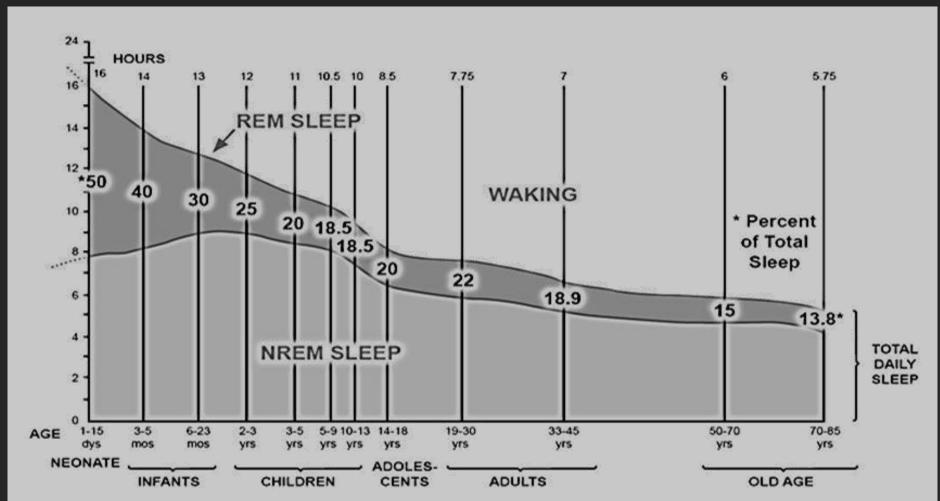


# How much sleep do we need?

- Eight hours?
- Enough?
- Enough for Whom?
- How much do you need?



#### Changes in sleep requirements with age







#### We do not require eight hours of sleep per night

## Sleep requirements vary with age

3 Years: 12 Hours

14 - 18 Years: 8 ½ Hours

5 – 9 Years: 10 ½ Hours

19 – 45 Years: 7 <sup>3</sup>/<sub>4</sub> - 7 Hours

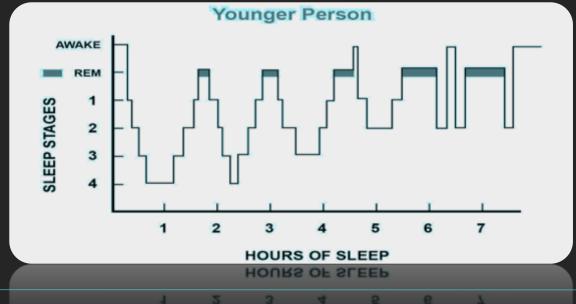
10 – 13 Years: 10 Hours

46 + Years: 7 – 5 Hours

These timings are approximate as people can be long or short sleepers at any age.

#### Changes in sleep requirements with age:



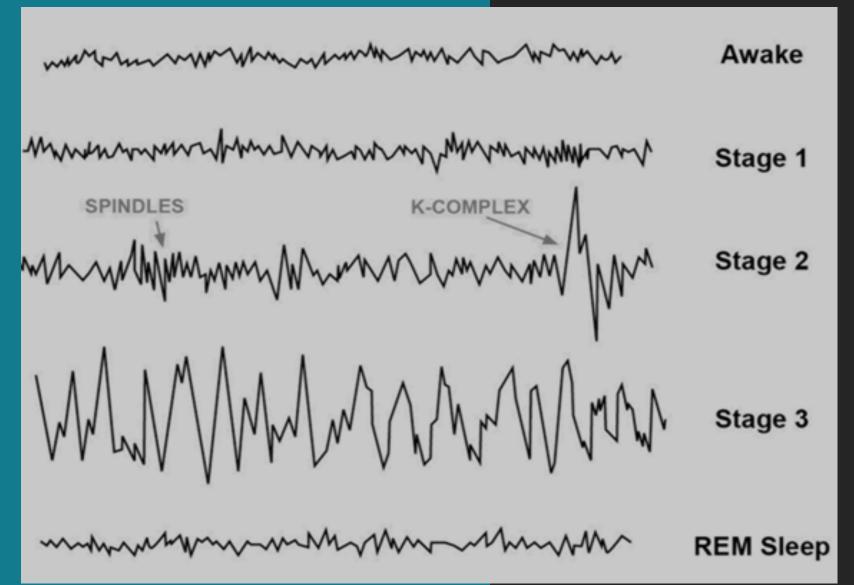








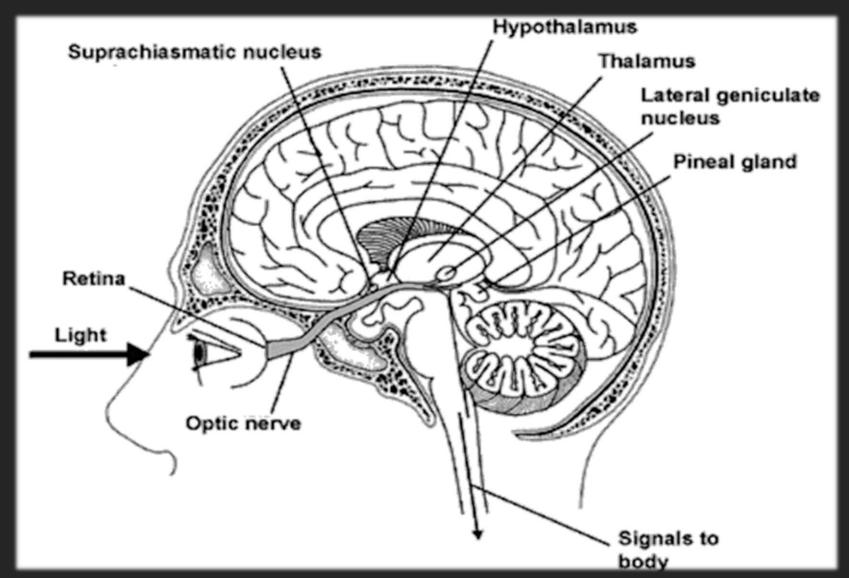
#### Wave patterns of Sleep







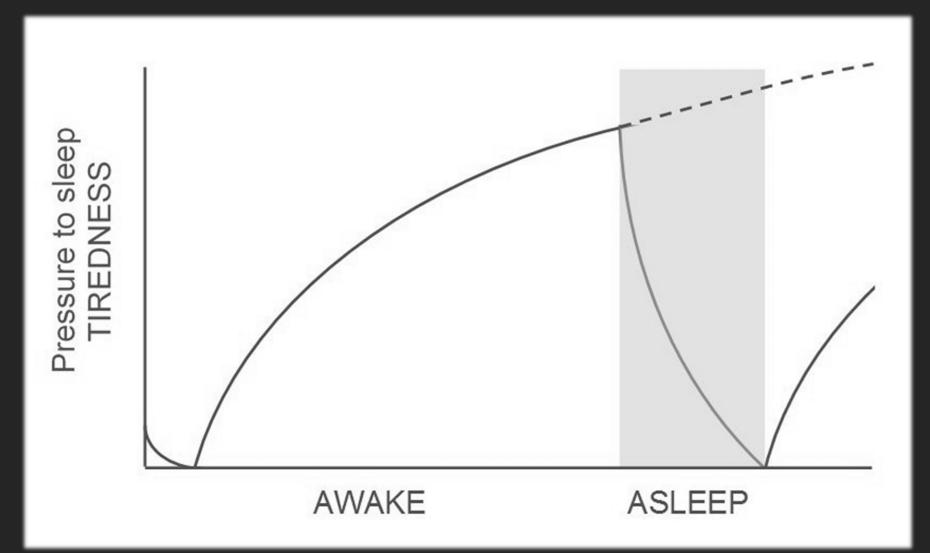
#### Retino-Hypothalamic Tract







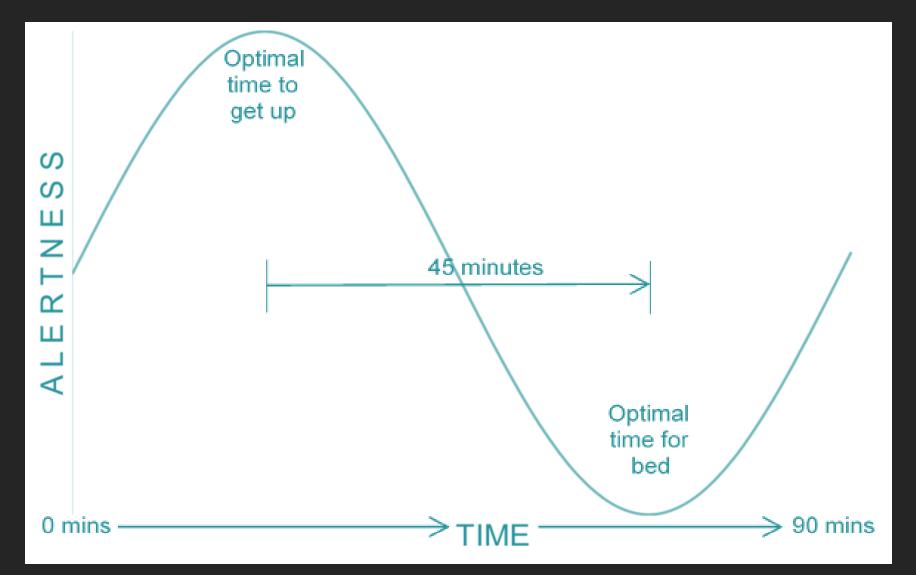
## Sleep Pressure







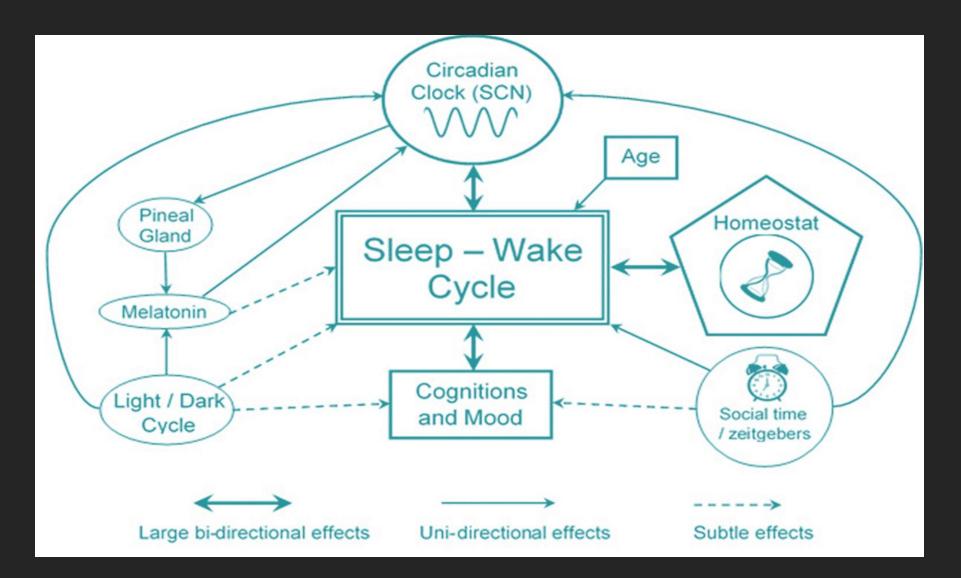
#### **Circadian Timing**







#### Sleep Mediation, Moderation and Control









## Psychobehavioural Treatments



## Sleep Types:







Morning Lark

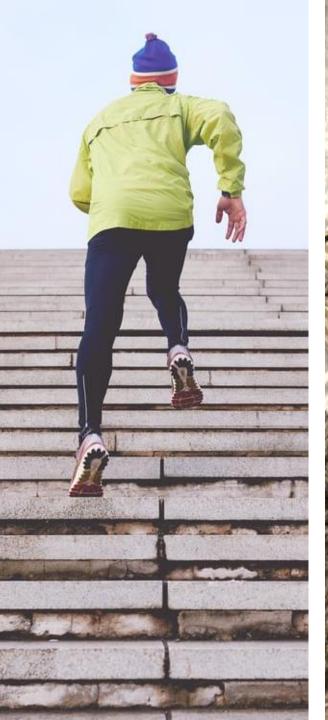
Morningness: Favour early rising and early bedtimes

**Ambivalent** 

Night Owl

Eveningness:
Favour late rising and late bedtimes







#### Routine and Behaviour



Humans are diurnal with two phases in a 24-hour period



We have evolved a set of behaviours for day and night



Changing these goes against our natural diurnal predispositions

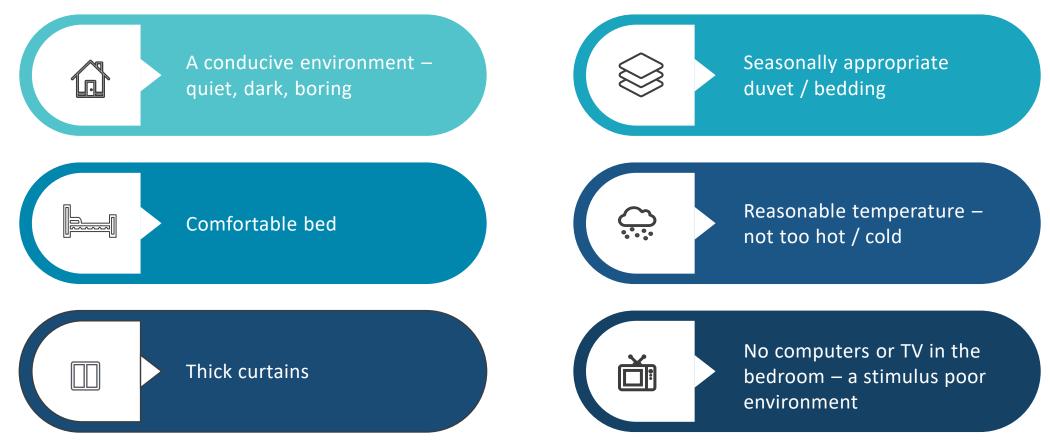


Humans thrive on routine



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## Good Sleep Practices





## Stimulus Control

- Regular bedtimes and wake times
- Fluid restriction in the evenings
- No milky drinks (unless habitual)
- No big meals or exercise too close to bedtime
- Only sleep in the bedroom to build the link between bed / bedroom and sleep











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#### Stimulus Control

Making the bedroom sensorially deprived / stimulus poor

Behaviourally and mentally active during the day = behavioural and mental inactivity during the night

Exposure to bright (natural) light can increase the amount of melatonin released at night time which promotes sleep



#### Sleep Restriction Therapy

Can't get to sleep within 15 – 20 minutes?

- Get up leave the bedroom only return when you're tired
- If sleep still doesn't come within 15 20 minutes, then repeat this process through the night
  - Get up at the same time each morning regardless
  - You may feel tired the next day, but you'll sleep better the next night



#### Contraindications for poor sleep

## Poor: routine, sleep practices, stimulus control including:





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