

A GUIDE TO SURVIVE

THE NOISY NIGHTS

Noise disrupts sleep by causing **repeated awakenings** and **heightened physiological arousal**, which over time is linked to negative effects on physical and mental wellbeing.

HERE ARE THE TOOLS YOU CAN USE TO IMPROVE YOUR SLEEP QUALITY

Sleep Onset Latency: the time taken to fall asleep after going to bed

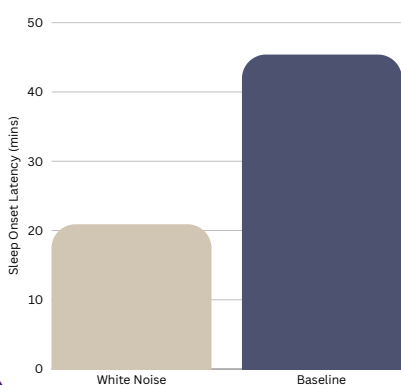
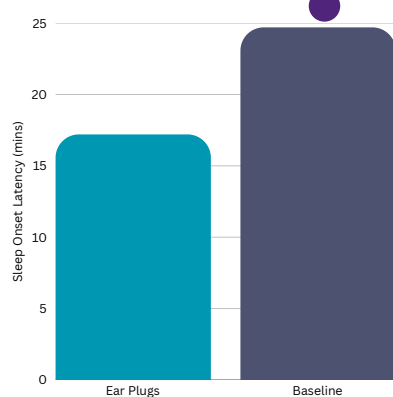
EAR PLUGS

WHAT IS IT?

Foam/silicone inserts for ear that physically block external noise

HOW DOES IT HELP?

- **Reduces sounds** up to 65dB entering the ear
- Has been consistently linked to improved perceived sleep quality
- **Reduces sleep onset latency (SOL)** →



WHITE NOISE

WHAT IS IT?

- A steady sound that plays across all frequencies with equal intensity
- Can be played from an app or a white noise machine

HOW DOES IT HELP?

- **Masks** other noises that disturb sleep.
- This reduces arousal, which **reduces sleep onset latency** and the number of **nighttime awakenings**

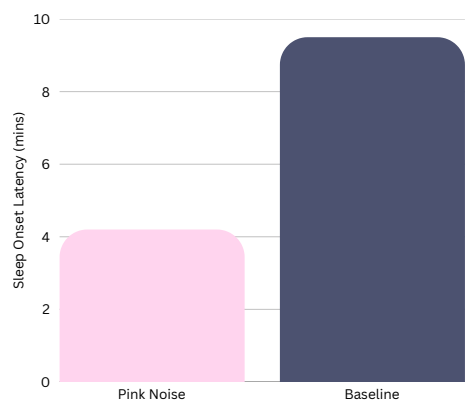
PINK NOISE

WHAT IS IT?

A deep, soothing sound with low frequency energy Occurs naturally in nature, e.g., rainfall, waves or rustling leaves

HOW DOES IT HELP?

- Allows for a more **stable sleep time** and **less sleep fragmentation** by **synchronising complex brain activity** and inducing brain waves into a slower rhythm



Slow-wave sleep is essential for physical restoration, memory consolidation and metabolic function!

CUES TO SLEEP

The natural drive to sleep is determined by:

- **Sleep pressure** (which increases with the time spent awake)
- **Circadian rhythm** - the suprachiasmatic nucleus (SCN) in the brain responds to changing light levels, regulating the levels of melatonin, which induces sleep

Through repeated pairing of white or pink noise with these natural cues, the noise becomes associated with feelings of sleepiness and entering a sleep state, eventually acting as signals for sleep.

THE DOWNSIDE

Research on the use of sleep aids must be interpreted cautiously

- **Not all effects are statistically analysed**
- **Small sample sizes (55.2% of studies had sample sizes less than or equal to 10).**
- **Differences in the measurements of sleep quality**
- **Differences in noise levels (range of 20 to 93dB)**
- **Short-term use of sleep aids may have been insufficient to observe an effect**

