

REST HUB

Sleep Ready

Sleep Overview

Importance of sleep

- > Sleep is one of the best strategies for physical and psychological recovery.
- > Adequate sleep can aid reaction time, coordination, decision-making, concentration, memory, mood, and athletic performance.
- > Sleep also plays a critical role in repairing and regenerating muscle tissue and assists in maintaining a healthy immune system.

Sleep quantity

- > General recommendations range between 7-9 hours of sleep each night.
- > On average, athletes require ~8 hours of sleep to feel refreshed, but typically only get 6.7 hours per night¹.

Sleep timing

- > It is important to establish a regular sleep routine by going to bed and waking up at a similar time each day.
- > Try to maintain a ± 30 minute window (e.g., if your regular bedtime is 10 pm, aim to go to bed between 9:30-10:30 pm).

To nap or not to nap?

- > Napping is a useful strategy to increase the total amount of daily sleep.
- > Naps should be between 20-90 minutes in duration, ideally take place between 1-4 pm, and finish ≥ 60 minutes before the commencement of exercise^{2,3}.
- > Nighttime sleep should always take priority.
- > If naps are negatively impacting nighttime sleep, they should be avoided.
- > Napping should not increase the time taken to fall asleep at night or quality of sleep at night.

Considerations



Behaviour

To avoid the potential alerting effects of stimulating content and the delaying of sleep time, avoid prolonged device use while preparing for, and when in bed. For some, the removal of electronic devices may elicit a stress response and could interfere with falling asleep.

Establish a device routine to satisfy the psychological needs of the athlete and allow for the maintenance of bedtime.

To prepare the body for sleep, maintain a consistent routine in the lead-up to bedtime each night.

Thinking about things from the day or plans for the next day may affect sleep. Use a to-do list to stay organised and reduce overthinking when trying to sleep.

Difficulty falling asleep or waking during the night? If lying in bed is:

- > **Relaxing:** continue to do so. Being in a restful state can help initiate sleep.
- > **Not relaxing:** briefly perform a quiet activity out of bed in low lighting, before returning to bed to attempt sleep.



Measuring sleep

Wearable devices may be useful for tracking long-term trends in sleep duration but have limitations for detecting subtle changes in sleep staging.

When reviewing data, focus on:

- > Total amount of sleep obtained rather than sleep stage metrics.
- > Changes in total sleep over several days. One or two nights of interrupted or reduced sleep is not cause for concern.

Avoid comparing data with others, particularly if using different wearable or monitoring devices.



Light

Natural sunlight exposure in the morning and late afternoon helps to regulate the body's internal clock.

Evening bright light exposure can impact the natural wind down for sleep. Minimise exposure by dimming lights or using warm rather than bright lighting.



Food & fluid

Avoid large meals within 2-3 hours of bedtime.

Avoid consuming large volumes of fluid before bedtime to reduce the likelihood of waking up to use the bathroom at night.

Avoid caffeine in the late afternoon and evening and consider overall caffeine intake across the day.



Sleep environment

Aim for a dark, quiet, cool (18-21 °C), and comfortable room.



Relax

Use relaxation techniques (e.g., progressive muscle relaxation, guided meditation) and dedicate time each day to relax and unwind.

Recommended Reading

¹ Sargent C, Lastella M, Halson S, Roach G. How much sleep does an elite athlete need? *Int J Sports Physiol Perform.* 2021 Dec 1;16(12):1746-1757. doi: 10.1123/ijsp.2020-0896.

² Lastella M, Halson S, Vitale J, Memon A, Vincent G. To nap or not to nap? A systematic review evaluating napping behavior in athletes and the impact on various measures of athletic performance. *Nat Sci Sleep.* 2021 Jun 24;13:841-862. doi: 10.2147/NSS.S315556.

³ Romyn G, Roach G, Lastella M, Miller D, Versey N, Sargent C. The impact of sleep inertia on physical, cognitive, and subjective performance following a 1- or 2-hour afternoon nap in semiprofessional athletes. *Int J Sports Physiol Perform.* 2022 May 23;17(7):1140-1150. doi: 10.1123/ijsp.2021-0414.

Gardiner C, Weakley J, Burke L, et al. The effect of caffeine on subsequent sleep: A systematic review and meta-analysis. *Sleep Med Rev.* 2023 Jun;69:101764. doi: 10.1016/j.smr.2023.101764.

Walsh N, Halson S, Sargent C, et al. Sleep and the athlete: Narrative review and 2021 expert consensus recommendations. *Br J Sports Med.* 2021 Nov 3;bjssports-2020-102025. doi: 10.1136/bjssports-2020-102025.

