

PERFECT NIGHTTIME ROUTINE = PERFECT PERFORMANCE?



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OVERVIEW:

Sleep duration and sleep quality have a critical role in exercise and sports performance of elite athletes. Daily sleep duration and a reduction of an accumulated sleep debt from chronic sleep loss are important considerations to optimize cognitive and physiological recovery, and ultimately performance of sports at all levels.

CHRONIC SLEEP LOSS RESULTS IN:

- Decreased submax and max weight training
- Increased risk of injury (1.7x increase risk of injury associated with <8 hours of sleep)
- Slower reaction time and impaired motor function (sleep loss is equivalent to legal intoxication)
- Reduced glucose metabolism by 30-40%
- Increased risk of illness susceptibility (4x increased risk of catching a cold with 6 or less hours of sleep)

IMPROVING SLEEP AND REDUCING ACCUMULATED SLEEP DEBT RESULTS IN:

- Increased basketball shooting percentages (9% increase in free-throws, 9% increase in 3-point field goals)
- Faster sprint time in NFL Combine drills (40-yard dash, 20-yard shuttle, 3-cone drill)
- 12% faster reaction time
- Decreased fatigue levels and daytime sleepiness
- Improved ratings of practices and games

The strategies below provide a good foundation of proper sleep for every athlete. It can take several weeks to adjust to new sleep habits, but athletes will soon start to experience the benefits of healthy sleep.

STRATEGIES TO IMPROVE SLEEP AND RECOVERY:

1. **Wake up with morning sunlight.** Get sunlight upon awakening – eat breakfast outdoors or team meetings outside.
2. **Reduce/eliminate caffeine and alcohol.** Refrain from caffeine (coffee, tea, energy drinks) in the late afternoon and early evening. Alcohol can prevent REM sleep and fragments the second half night of sleep.
3. **Evaluate nutrition and hydration.** Consider a carbohydrate + protein snack before bed. Prioritize good hydration during the day and reduce liquids before bed.
4. **Make your bedroom like a cave – dark, quiet, cool, and comfortable.** Blackout curtains are strongly recommended. Earplugs can minimize noise and a fan can serve doubly to circulate air as well as a white noise machine. Cooler temperatures are better for sleep quality.
5. **Power down.** Make your bedroom a technology free zone and eliminate distractions.
6. **Prioritize a 20-30 min routine before bed** (i.e. reading, stretching, yoga). Avoid TV, laptop, and video games 1 hour before bed. The emitted light from these devices can prevent sleep and decrease melatonin release which is important for sleep.
7. **Establish a consistent sleep schedule.** Go to bed and wake up at the same time every day. Our bodies like regularity and with a regular sleep schedule, it will naturally start to anticipate sleep. Set a daily alarm on your phone to remind you that you have 30 minutes to wrap up your day and head to bed.
8. **Sleep only when you are tired.** Don't fight sleep! Remember to still maintain a regular sleep schedule which will help your body anticipate sleep at night.
9. **Obtain 8-10+ hours of sleep every night.** Adequate sleep is critical every day, not just the night before a game/competition.
10. **Leverage 20-30 min power nap/pre-game nap.** Power naps provide a temporary boost in alertness and performance. Be cautious of longer naps which can result in sleep inertia (feelings of grogginess) upon awakening from deep stages of sleep.

PERFECT NIGHTTIME ROUTINE = PERFECT PERFORMANCE? (CONTINUED)



SLEEP AND RECOVERY GOALS:

1. Implement effective sleep management to promote good sleep quality and prioritize adequate sleep duration
2. Pay back accumulated sleep debt and prioritize sleep over the entire season, not just the night before a game.
3. Aim for 8-10+ hours of sleep every night.
4. Aim for 85% sleep efficiency (time asleep/ time in bed).

TEAM RECOMMENDATIONS:

1. Assess sleep patterns and habits
2. Utilize sleep logs and recovery logs to monitor changes in sleep patterns and associated daytime performance
3. Evaluate home and travel scheduling to optimize recovery and performance
4. Create a culture and framework to provide opportunity for healthy and adequate sleep
5. Develop a personalized sleep plan for each athlete
6. Consider objective sleep monitoring
7. Evaluate for common sleep disorders (i.e. sleep apnea, insomnia, etc.)

RESOURCES:

1. National Sleep Foundation – www.sleepfoundation.org
2. American Academy of Sleep Medicine – www.aasmnet.org
3. Promise of Sleep by William Dement, MD PhD

