



SLEEP TACTICS FOR BETTER ATHLETE HEALTH & PERFORMANCE

Dr. Amy Bender from the University of Calgary

“If sleep does not serve an absolute vital function, then it is the biggest mistake the evolutionary process ever made,” notes Allan Rechtschaffen, Ph.D., sleep research pioneer.

Sleep is vital for your health and well-being. Many important functions take place during sleep. Toxins get washed out from the brain, muscles are repaired and rebuilt, and important immune functions, such as increased effectiveness of our killer T-cells, take place during sleep. Optimal sleep is critical and considered to be the most potent performance enhancer available. It's no wonder why sleep is important for an athlete, as lack of sleep can lead to decision-making problems, shorter time to exhaustion, poor nutrition choices, impaired immunity and greater injury risk. Dr. Amy Bender from the University of Calgary discusses how athletic performance professionals can ensure athletes get enough quantity, quality and timing of sleep so they can perform better on and off the field.

QUANTITY:

According to current [recommendations](#), adults need 7-9 hours of sleep, with teenagers needing around 8-10 hours. However, these recommendations are not specific to an athlete who has more physical and cognitive demands from the sport. Therefore, it is likely that athletes need more rest. In fact, a group of adolescent athletes who got less than 8 hours of sleep were at [higher risk of injury](#).

- **Recommendation:** An athlete should think of sleep needed across the week. For example, if the athlete has a goal of 8 hours of sleep per day, multiply by 7 to get 56 hours across the week. If the athlete gets a poor night of sleep or has a hard time falling asleep after a competition, be flexible. Make up for it with an early bedtime, nap or sleep-in to get to that weekly goal.

QUALITY:

According to one [study](#), athletes typically have poorer sleep when compared to a control group of healthy sleepers. The many reasons for this include: irregular training schedules, travel fatigue and jet lag, hyperarousal, refuelling before sleep, pain and muscle soreness and consuming caffeine and alcohol.

- **Recommendation:** Caffeine should be strategically consumed, not out of habit, due its to [impact on sleep](#). Athletes should also incorporate a pre-sleep routine to make it easier to fall asleep after a late-night game or even when they're in a new sleep environment, like a hotel.

TIMING:

One [study](#) notes that roughly 15% of the population are early morning chronotypes (larks), 15% are late chronotypes (night owls) and the rest (70%) are intermediate types. It is important to understand that chronotypes change across the lifespan, with people in their early 20s typically showing the highest prevalence for being a night owl. Athletes who are evening types tend to have [more sleep problems](#) than those who are morning or intermediate types. Chronotypes have a major genetic component but can still be modified with light therapy, sleep hygiene techniques and melatonin.

- **Recommendation:** Athletes who are evening types can't simply go to bed earlier, as it is a part of their biology to want to stay up later. These athletes may need extra help from a sleep specialist if they are struggling with sleep problems. Utilize the [Athlete Sleep Screening Questionnaire](#) to screen for athlete sleep problems.

KEY TAKEAWAY

Sleep strategies can effectively lower the risk of injury and illness. There are many basic interventions that can be done to help improve the sleep of athletes, which will benefit the athlete both on and off the field.

