

# SLEEP AND PERFORMANCE

## Central Nervous System Readiness <sup>1</sup>

“Athletes who get 8 to 10 hours of sleep are more likely to improve their performance in the game. It’s not common knowledge, because if people understood how much of a difference (getting more sleep) could make athletically, they’d incorporate it more into their lives and not focus solely on nutrition and exercise.”

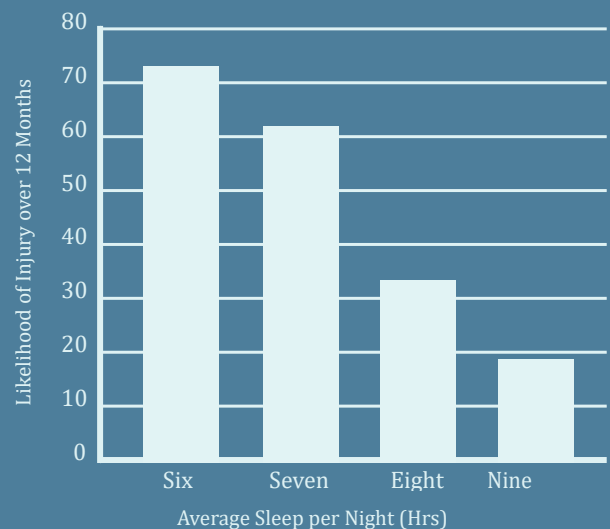
-Cheri Mah

(Stanford Researcher,  
Stanford Sleep Study)

## SLEEP IS THE EQUALIZER

If the brain doesn’t work, the body doesn’t work. Sleep is the fatigue factor in brain function for both mental and physical performance. Research by Cheri Mah, Stanford Researcher, indicates that the more athletes sleep, the better they perform. After a night of sleeping 8 to 10, hours athletes store up roughly 14 hours of central nervous system readiness. When athletes sleep less than 8 hours, readiness decreases dramatically which reduces the athlete’s pre-movement, movement, balance, and reaction time. When this occurs, chances of injury increase. The graph pictured below compares an athlete’s time sleeping to their injury rate.

Likelihood of Injury Based on Hours of Sleep per Night



## Six Reasons Why We Need to Sleep:

- 1. BOOSTS MEMORY** - Sleeping strengthens the neural connections that form memories.
- 2. IMPROVES THE HEART** - A lack of sleep increases calcium build-up in arteries, which increases the risk of heart diseases.
- 3. DECREASES DEPRESSION** - Sleeping releases melatonin and serotonin, which help eliminate stress hormones, adrenaline, and cortisol, which in turn makes us happier.
- 4. INCREASES CREATIVITY** - With memory at its peak, the mind restored, and hormones balanced, the mind has a healthier imagination, resulting in increased creativity.
- 5. SUPPORTS WEIGHT LOSS** - A lack of sleep creates a lack of the hormone leptin which is stored in the fat cells and tells us when to stop eating.
- 6. MAKES YOU HEALTHY** - Immune systems rely on sleep to regain strength.<sup>2</sup>

<sup>1</sup> Adapted from Life of an Athlete New Hampshire's *The Coaches' Playbook*.

<sup>2</sup> Research by 1800pap.com, The Journal of the American Medical Association