

# Study shows sleep extension improves athletic performance and mood

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Athletes who extended their nightly sleep and reduced accumulated sleep debt reported improvements in various drills conducted after every regular practice.

Results of the study indicated that sleep extension in [athletes](#) was associated with a faster sprinting drill (approximately 19.12 seconds at baseline versus 17.56 seconds at end of sleep extension), increased hitting accuracy including valid serves (12.6 serves compared to 15.61 serves), and hitting depth drill (10.85 hits versus 15.45 hits).

According to the lead author of the study, Cheri Mah, M.S., researcher at the Stanford Sleep Disorders Clinic and Research Laboratory at Stanford University in CA., many of the athletes who participated in the study realized for the first time the importance of sleep and how it impacts their performance during competitions.

"Traditionally, elite athletes dedicate numerous hours to daily practice, strength training, and conditioning as well as work closely with nutritionists in hopes of optimizing their [athletic performance](#)," said Mah. "However, very little, if any, attention is focused on an athlete's sleeping patterns and habits. While most athletes and coaching staff may believe that sleep is an important contributing factor in sports, many do not realize that optimal or peak performance can only occur when an athlete's sleep and sleep habits are optimal."

The study included five healthy students between the ages of 18 and 21

who were members of the Stanford Women's tennis team. Athletes maintained their habitual sleep/wake patterns for a two to three week baseline during their regular tennis seasons. Athletic performance assessments were reported after every practice throughout the study, including sprinting and hitting drills. Athletes then extended their sleep, aiming for

10 hours a night for a period of five to six weeks. Mood and daytime sleepiness were monitored and daily sleep/wake activities were monitored through actigraphy and sleep journals. The study was conducted specifically during the regular tennis season to provide data during weekly practices as well as during tournaments and competitions.

Mah believes that findings of this study would be pertinent to other sports, in that daytime sleepiness would be reduced and mood and athletic performance would improve based on findings from initial trials of this study, which were presented at the 2007 (focusing on Basketball) and 2008 (focusing on swimming) SLEEP Conferences.

Source: American Academy of Sleep Medicine ([news](#) : [web](#))

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