

# GIVE IT A REST: THE BENEFITS OF QUALITY SLEEP

By Mike Asken

“We’re teaching our players:  
Sleep is a weapon.”

Sam Ramsden, Director of Player Health and Performance, Seattle Seahawks

Decreased alertness, slowed decision-making, increased reaction time, irritability, microsleep, or outright falling asleep — the impact of sleep deprivation on human performance should be well-known by now, even if it is frequently minimized or ignored. What is often overlooked, or at least is not always emphasized in discussions of sleep deprivation, are the benefits of *quality* sleep.

While among the most important benefits of sound sleep are the prevention or reversal of sleep deprivation effects, there is also a significant enhancement of performance and health. Just as there is a difference between being sick, not being sick, and being healthy, there is an important difference between being sleep deprived, not being sleep deprived, and experiencing quality sleep.

There are aspects to sleep which highlight the need to guard it. (It is said that the cornerstone of superathlete Tom Brady’s training regimen is sleep, and he respects it by often going to bed at 8:30 p.m.)<sup>1</sup> The need for sleep is, to a great part, genetically determined. And

while there are those who operate well on a few hours, most adult individuals require seven to eight hours for optimal function.<sup>2</sup> Adolescents require even more sleep.<sup>3</sup>

Further, the need for sleep cannot be modified. While it is possible to function well on reduced sleep for a while, or at least *function* on reduced sleep, when constraints are lifted, individuals return to their typical sleep pattern. Unfortunately, it also appears that sleep cannot be stored or banked. While having had quality sleep and being well-rested can help initially deal with a period of restricted sleep, sleep cannot be spent as needed across an extended period. Finally, a complicating factor is that our ability to recognize our own deficits in performance and behavior when sleep-deprived becomes impaired

“  
**Just as there is a difference between being sick, not being sick and being healthy, there is an important difference between being sleep deprived, not being sleep deprived and experiencing quality sleep.**  
”

with that lack of sleep. (We also then don't appreciate our deteriorating performance being pointed out to us!)

The benefits and impact of quality sleep can be divided into several different but overlapping categories:

- Physical skill performance
- Cognitive skill performance
- Emotional control and behavior
- Overall health.

## PHYSICAL PERFORMANCE

It should be well-recognized that rest or recovery periods are central to effective physical strength and conditioning training regimens. Physical overtraining leads not only to decreased gains, but also to decreased performance, mood and motivation. Sleep is an essential component of physical recovery. Endocrine specialist Dr. Nicky Keay has called sleep "a recovery strategy vital to support both health and performance."<sup>4</sup>

Sleep also enhances the learning of motor skills. A unique study at Stanford University<sup>5</sup> looked at the effects of increasing sleep for members of a college basketball team. The results showed that with extended sleep, the players showed faster sprint times, increased free throw accuracy and increased three-point shot accuracy.

## COGNITIVE PERFORMANCE

Just as with motor skills, sleep enhances cognitive learning and performance. Sleep helps consolidate, or ingrain, learning and replenishes neurotransmitters that help all brain processes. Attention, accuracy, vigilance and decision-making are aided by quality sleep.<sup>6,7</sup>

Memory and recall may also be improved by sleep.<sup>8</sup> It is significant that the International Association of Chiefs of Police recommends in its guidelines for managing officer-involved shootings<sup>9</sup> that officers not be extensively

**Just as with motor skills, sleep enhances cognitive learning and performance. Sleep helps consolidate, or ingrain, learning and replenishes neurotransmitters that help all brain processes. Attention, accuracy, vigilance and decision-making are aided by quality sleep.**

interviewed about an incident (other than public safety statements) before rest and a sleep cycle.

## MOOD AND EMOTIONAL CONTROL

Sleep has an important connection to mood.<sup>2</sup> In fact, negative mood changes like irritability, lowered frustration tolerance, decreased motivation and depression are often the first effects seen with poor sleep or sleep deprivation. It has been said that without enough sleep, we all become "tall two-year-olds." Scores on the "Profile of Mood States" questionnaire show increasing negative mood indicators, as do subjective reports of decreased well-being, with poor sleep. Mood is maintained more consistently with quality sleep. This is especially important in mission-critical team operations where communication and coordination are essential.

## OVERALL HEALTH

Sleep is restorative not just for performance but also overall health.<sup>10,11</sup> It facilitates healing and repair of the body's tissue and cells. Sleep also plays a major role in maintaining hormonal function and balance, which affects hormones that influence appetite and weight, insulin regulation and muscle mass. Maximal immune system function is affected by sleep quality.

Quality sleep is related to reduced injuries and longer careers. The perception of and ability to deal with pain are affected by rest and sleep.

It should be noted that *excessive* sleep has been shown in some studies<sup>12</sup> to be related to negative health consequences such as heart disease, back pain, diabetes, obesity, headaches, dementia and death. However, these findings are not consistent and may be accounted for by other intervening factors such as depression.

**Quality sleep is related to reduced injuries and longer careers. The perception of and ability to deal with pain are affected by rest and sleep.**

Any discussion of the benefits of sleep must include a comment on napping. While the nap is often maligned as a sign of weakness or laziness, the reality is that more and more research suggests napping is valuable for maintaining and restoring function, especially in sleep-depriving environments.<sup>7,13</sup> Naps of five to 15 minutes in length have been shown to have positive effects lasting one to three hours. However, for naps to be effective, rules from "nap science" need to be respected, such as limiting naps to about 20 minutes to prevent entering deep stages of sleep or avoiding nap times such as late morning or early evening.

**While life circumstances, work schedules, the awareness (or lack of it) by police departments or police teams can all be challenges to promoting and guarding quality sleep, quality of sleep ultimately requires individual commitment and responsibility.**

While life circumstances, work schedules, the awareness (or lack of it) by police departments or police teams can all be challenges to promoting and guarding quality sleep, quality of sleep ultimately requires individual commitment and responsibility. First, with chronic sleep disruption, it is always important to rule out medical problems that may be affecting quality of sleep. Beyond that, maintaining sleep quality requires discipline.

This point was clearly seen in the studies of the impact of reduced/limited working hours for physicians in training. Concern about sleep deprivation in medical residents led to regulations limiting the number of hours worked to allow for more time to sleep. One unfortunate finding in the studies which evaluated this change, however, was that residents didn't consistently sleep more with their extra time.<sup>14</sup> Instead, they studied, recreated, spent more time with their families — all important activities, but ones still detracting from total sleep.

While the advice to “sleep ‘til you're hungry and eat ‘til you're sleepy” may seem like an attractive philosophy for life, it is not realistic, healthy or productive. Short of that, what is required is awareness and an action plan to avoid sleep deprivation where possible, and maximize quality sleep consistently. ■

*The content of this article is that of the author and does not necessarily represent the official opinions, positions or policies of any organization with which he is associated.*

#### ABOUT THE AUTHOR

**Mike Asken** is the psychologist for the Pennsylvania State Police. He is a member of the NTOA's Health and Wellness Committee. He is also the author of “MindSighting: Mental Toughness for Police Officers in High Stress Situations.” [www.mindsighting.com](http://www.mindsighting.com).

#### FOOTNOTES

1. Manfred, T. “Tom Brady explains why he goes to bed at 8:30.” *Business Insider*. November 10, 2014. [www.businessinsider.com/tom-brady-sleep-2014-11](http://www.businessinsider.com/tom-brady-sleep-2014-11).
2. “2013 Sleep and Exercise Survey.” National Sleep Foundation. [www.sleepfoundation.org/2013poll](http://www.sleepfoundation.org/2013poll).
3. “Sleep in adolescents (13-18 years).” Nationwide Children's Hospital. [www.nationwidechildrens.org/sleep-in-adolescents](http://www.nationwidechildrens.org/sleep-in-adolescents).
4. Keay, N. “Sleep for health and sports performance.” *BMJ Blogs*. February 7, 2017. <http://blogs.bmj.com/bjbm/2017/02/07/sleep-health-sports-performance>.
5. Mah, C. “The effects of sleep extension on the athletic performance of collegiate basketball players.” *Sleep*, 2011, 943-50.
6. Miller, N., Matsangas, P., et al. “Fatigue and its effect on performance in military environments.” In *Performance Under Stress* (Human Factors in Defence, P. Hancock & J. Szalma (eds.). Surrey, UK: Ashgate, 231-249.
7. Caldwell, John A., J. Lynn Caldwell, and Regina M. Schmidt. “Alertness management strategies for operational contexts.” *Sleep Medicine Reviews* 12, no. 4 (2008): 257-73. doi:10.1016/j.smrv.2008.01.002.
8. Geiselman, RE. “Rest and eyewitness memory recall.” *American Journal of Forensic Psychology*, 1<sup>st</sup> ser., 28, no. 21 (2010).

9. “International Association of Chiefs of Police Officer-Involved Shooting Guidelines.” The International Association of Chiefs of Police. <http://www.theiacp.org/portals/0/documents/pdfs/psych-officerinvolvedshooting.pdf>.

10. Harvard Health Publications, [www.harvardhealth.edu](http://www.harvardhealth.edu).

11. Carpenter, S. “Awakening to sleep.” *APA Monitor on Psychology* 44, (2013): 40-45.

12. Boyles, S. “Sleeping for 9 hours may be a sign of early dementia.” *Medpage Today*. 2017. [medpagetoday.com](http://medpagetoday.com).

13. Krueger, G. “Sustaining human performance during security operations in the new millennium.” In *Enhancing human performance in security operations: international and law enforcement perspectives*, P. Bartone, et al. Springfield, IL: Charles C. Thomas, 2010.

14. Schuh, L. “Pilot trial of IOM duty hours recommendations in a neurology residency program: unintended consequences.” *Neurology* 77, no. 9 (2011): 883-87.

For more on sleep deprivation in law enforcement, see the following articles published in *The Tactical Edge*:

- “Sleep on it” by Alexis Artwohl (Summer 2010)

- “Recognizing and mitigating fatigue caused by sleep deprivation: A command perspective” by Kevan Dugan (Winter 2012)



We want to know what you think. Email [editor@ntoa.org](mailto:editor@ntoa.org) with feedback or questions about this article.