

## CONSENSUS STATEMENT

# Recommended Amount of Sleep for a Healthy Adult: A Joint Consensus Statement of the American Academy of Sleep Medicine and Sleep Research Society

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Sleep is essential for optimal health. The American Academy of Sleep Medicine (AASM) and Sleep Research Society (SRS) developed a consensus recommendation for the amount of sleep needed to promote optimal health in adults, using a modified RAND Appropriateness Method process. The recommendation is summarized here. A manuscript detailing the conference proceedings and evidence supporting the final recommendation statement will be published in *SLEEP* and the *Journal of Clinical Sleep Medicine*.

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## CONSENSUS STATEMENT

- Adults should sleep **7 or more** hours per night on a regular basis to promote optimal health.
  - Sleeping less than 7 hours per night on a regular basis is associated with adverse health outcomes, including weight gain and obesity, diabetes, hypertension, heart disease and stroke, depression, and increased risk of death. Sleeping less than 7 hours per night is also associated with impaired immune function, increased pain, impaired performance, increased errors, and greater risk of accidents.
  - Sleeping more than 9 hours per night on a regular basis may be appropriate for young adults, individuals recovering from sleep debt, and individuals with illnesses. For others, it is uncertain whether sleeping more than 9 hours per night is associated with health risk.
  - People concerned they are sleeping too little or too much should consult their healthcare provider.

## METHODOLOGY

Healthy sleep requires adequate duration, good quality, appropriate timing and regularity, and the absence of sleep disturbances or disorders. Sleep duration is the most frequently investigated sleep measure in relation to health. Furthermore,

the US Department of Health and Human Services created a Sleep Health Objective to “increase the proportion of adults who get sufficient sleep” in Healthy People 2020, a federal initiative to improve the nation’s health.<sup>1</sup> Thus our recommendation focuses on this sleep parameter. A panel of 15 experts in sleep medicine and research used a modified RAND Appropriateness Method<sup>2</sup> to develop a recommendation regarding the sleep duration, or sleep duration range, that promotes optimal health in adults aged 18 to 60 years.

The expert panel reviewed published scientific evidence addressing the relationship between sleep duration and health, using a broad set of National Library of Medicine Medical Subject Headings (MeSH) terms and no date restrictions, which resulted in a total of 5,314 scientific articles. The process was further guided by the Oxford grading system.<sup>3</sup> The panel focused on nine health categories with the best available evidence in relation to sleep duration: general health, cardiovascular health, metabolic health, mental health, immunologic function, human performance, cancer, pain, and mortality. Consistent with the RAND Appropriateness Method, multiple rounds of evidence review, discussion, and voting were conducted to arrive at the final recommendation. The process to develop this statement was conducted over a 12-month period and concluded with a consensus meeting held in February 2015 in Chicago, Illinois.

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## DISCUSSION & FUTURE DIRECTIONS

Current evidence supports the general recommendation for obtaining 7 or more hours of sleep per night on a regular basis to promote optimal health among adults aged 18 to 60 years. Individual variability in sleep need is influenced by genetic,

behavioral, medical, and environmental factors. A clearer understanding of the precise biological mechanisms underlying sleep need continues to require further scientific investigation.

This recommendation creates a foundation to raise awareness and improve understanding of sleep effects on health. The recommendation provides a basis for:

- Educating the public and healthcare providers on the importance of adequate sleep duration for health.
- Encouraging individuals to obtain adequate sleep duration.
- Discussing the economic and social benefits of adequate sleep duration, thereby informing public policy.
- Promoting research on the role of sleep duration in health and well-being.

Research that directly examines the effects of sleep duration on health may lead to revisions of this recommendation in the future.

#### DISCLOSURE STATEMENT

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Pharmaceuticals, Emmi Solutions, Eisai, CME Outfitters, and Otsuka and has received research support from the NIH. Dr. Dinges has received research support from NIH, NASA, ONR and FMCSA DOT, and has consulted for Mars, Inc. He is Editor-In-Chief of *SLEEP*. Dr. Grandner has consulted for Bayer and Nexalin Technologies and has received research support from Bentley Systems. Dr. Kushida has received research support from ResMed, Jawbone, Cephalon, Aerial BioPharma, Impax Laboratories, Inc., Zephyr Sleep Technologies, Philips-Respironics, Morphy Smart Bed, and Nokia. Dr. Malhotra has participated in speaking engagements for Teva Pharmaceuticals. Dr. Martin has received research support from Equinox Fitness. Dr. Patel has received research support from the American Sleep Medicine Foundation. He has received a stipend for Chairing the Young Investigator Research Forum from the American Academy of Sleep Medicine and a stipend for authorship from the American College of Physicians. Dr. Quan has consulted for Global Corporate Challenge. Dr. Watson has received research support from the NIH and NSF. He is President of the American Academy of Sleep Medicine and a member of the Board of Directors of the American Sleep Medicine Foundation. The other Consensus Conference Panel members have indicated no financial conflicts of interest.

#### REFERENCES

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