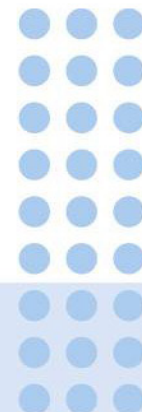
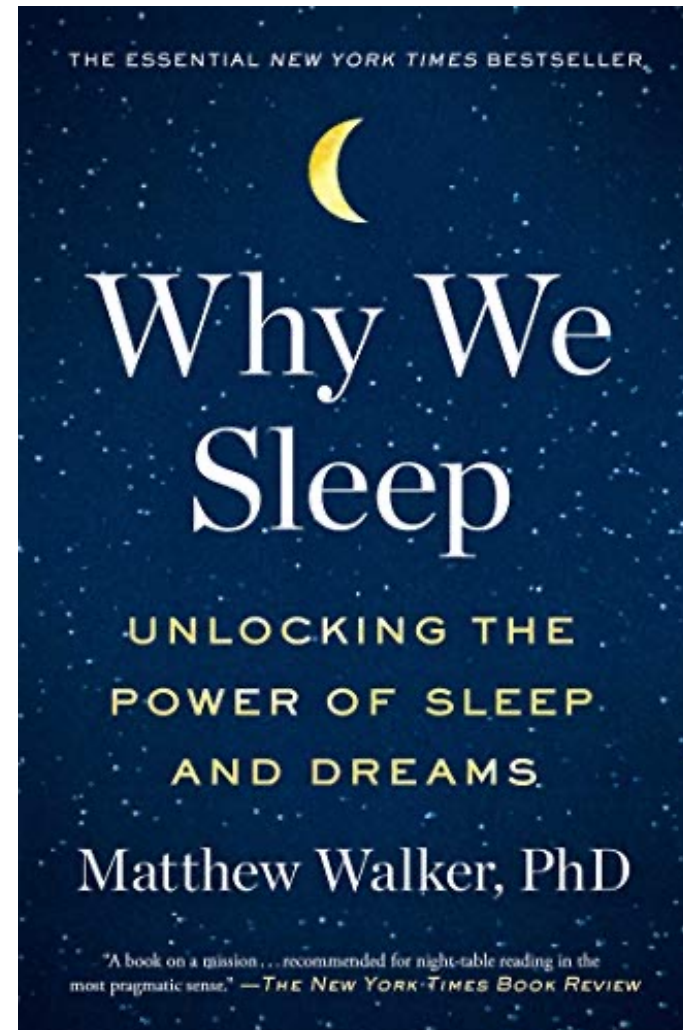
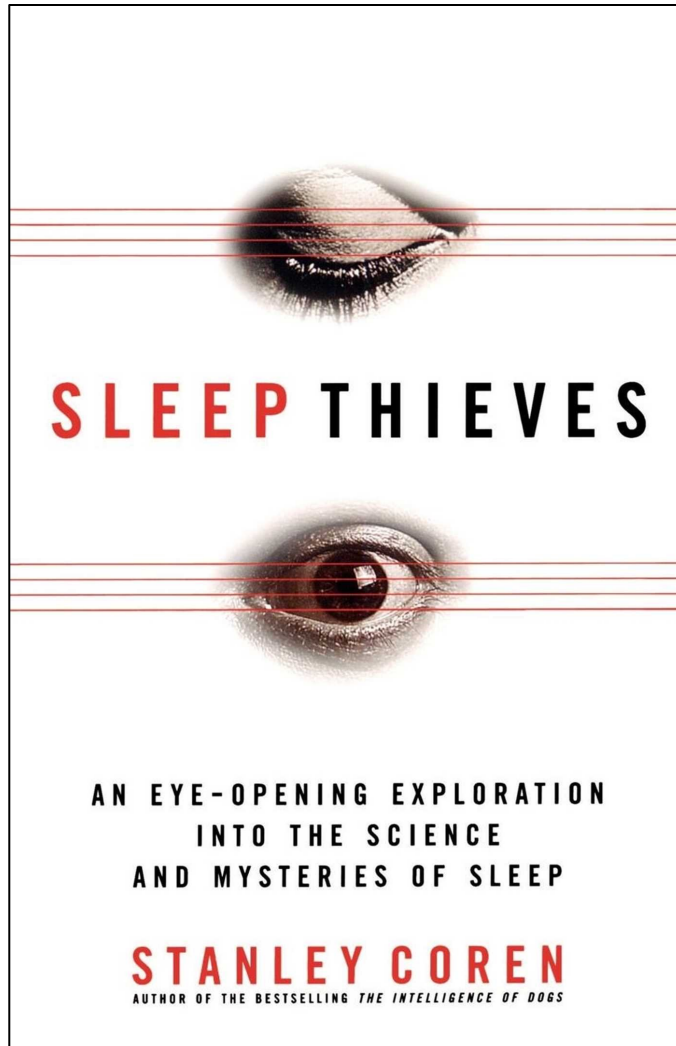


SØVN GJENNOM TIDENE - SOVER VI MINDRE I DAG?

Ståle Pallesen
Professor, dr. psychol.



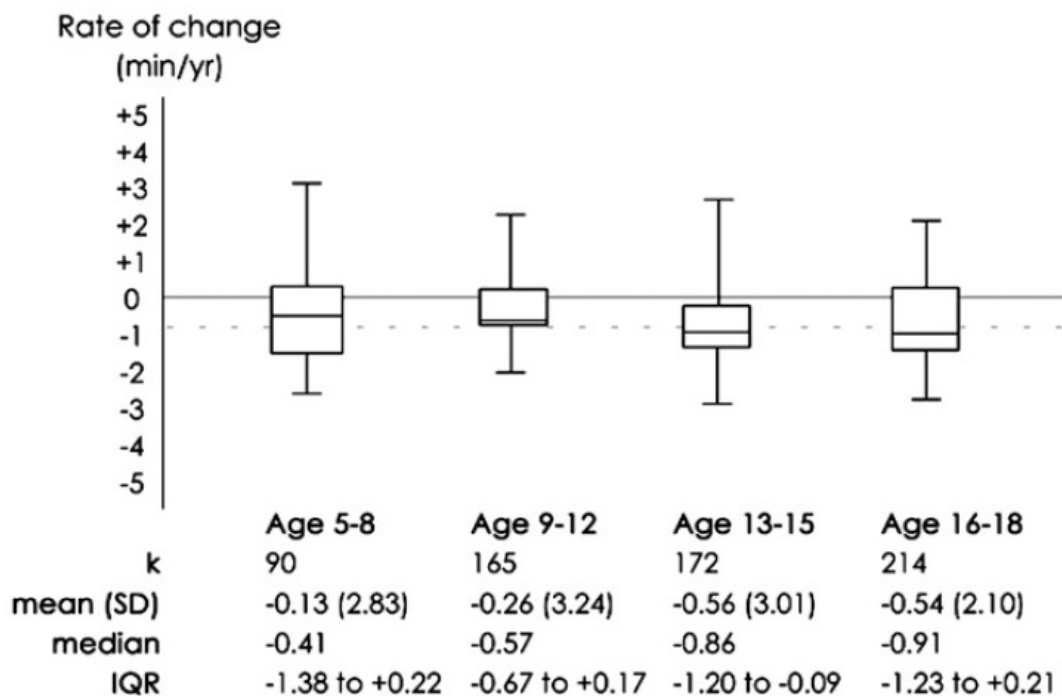






SEKULÆRE ENDRINGER I SØVN HOS UNGDOM

- Metaanalyse av søvnlengde hos barn 5-18 år.
- Data fra 690 474 barn fra 20 land i perioden 1905-2008.
- I alt 218 studier inngikk.





SEKULÆRE ENDRINGER I SØVN HOS VOKSNE

- Litteraturgjennomgang av 12 studier fra 15 land.
- Det ble undersøkt om søvnlengde hos voksne hadde endret seg de siste 40 år (1960-2007).

Nedgang (0.1-0.6 min/år)	Uendret/blandet	Økt (med 0.1-1.7 min/år)
Østerrike	USA	Storbritannia
Belgia	USA	Bulgaria
Finland	USA	Canada
Tyskland	USA	Frankrike
Japan	Sverige (Gøteborg)	Korea
Russland (Sibir)		Nederland
		Polen



SEKULÆRE ENDRINGER I SØVN HOS VOKSNE

- Litteraturgjennomgang av 168 studier fra flere ulike land.
- Det ble undersøkt om søvnlengde hos voksne hadde endret seg mellom 1960 og 2013.

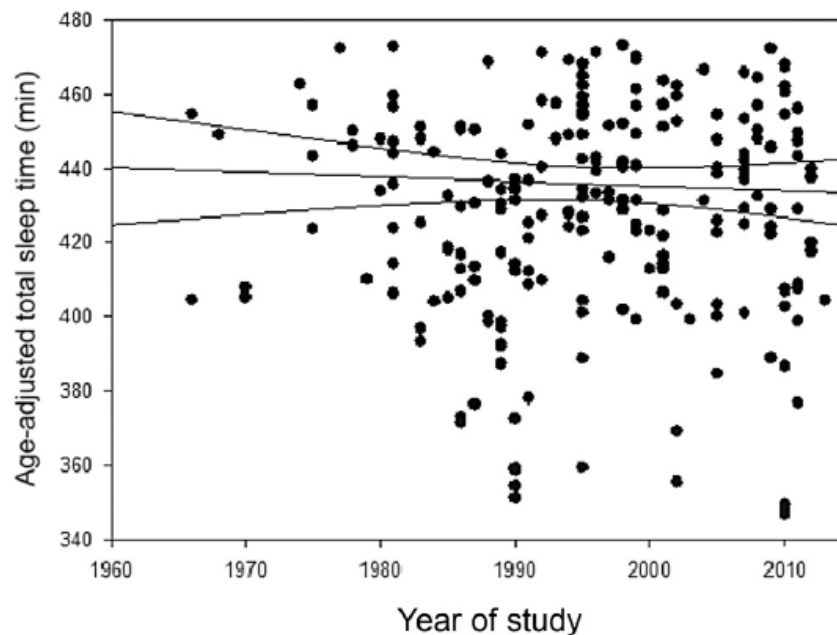
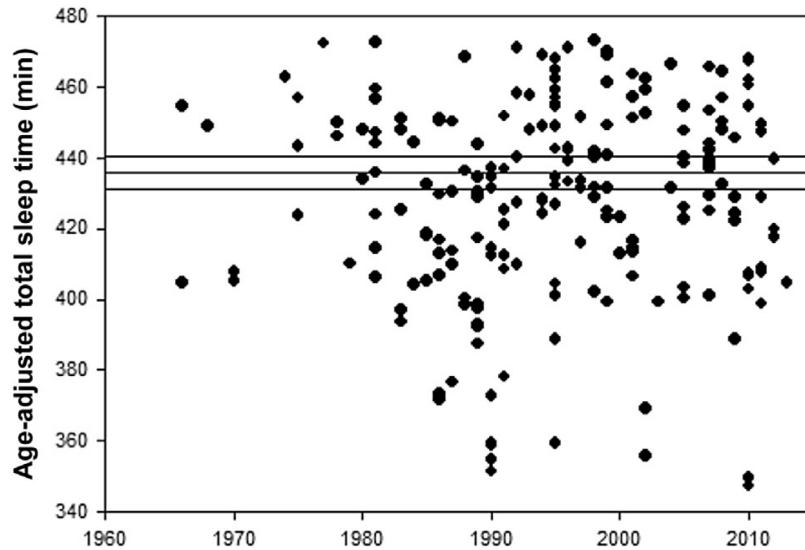


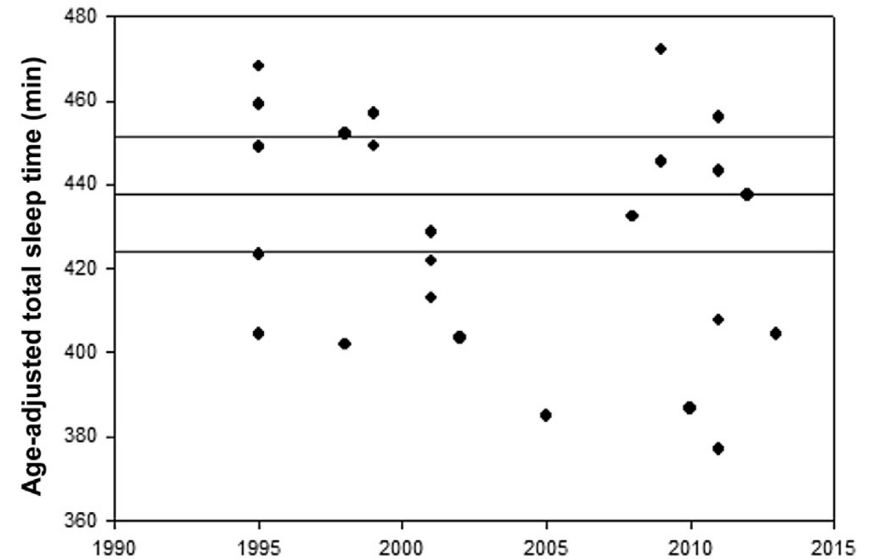
Fig. 2. Association of year of study with age-adjusted total sleep time (min) for all data points. The regression line and 95% confidence intervals are displayed.



SEKULÆRE ENDRINGER I SØVN HOS VOKSNE



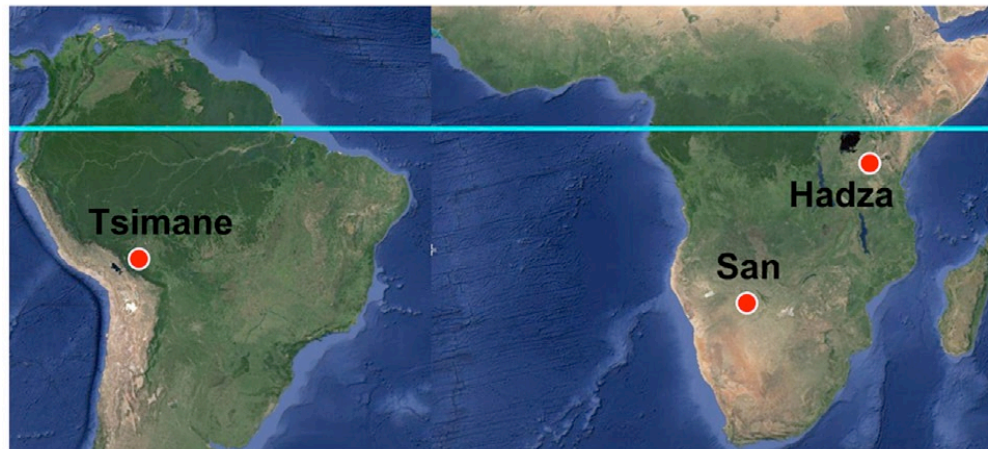
(a) Year of study
Polysomnographic studies



(b) Year of study
Actigraphic studies



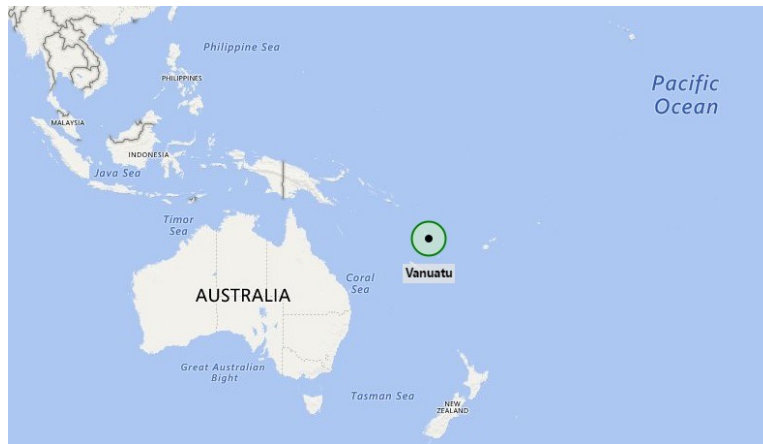
PRE-INDUSTRIELLE SAMFUNN



Samfunn	Søvn lengde	Årstidsvariasjon
Hazda (Tanzania)	6.2 timer	
San (Namibia)	5.7 - 6.6 timer	Lengst om vinteren
Tsimane (Bolivia)	6.2 - 7.1 timer	Lengst om vinteren
Gjennomsnitt	6.4 timer	



PRE-INDUSTRIELLE SAMFUNN



- Jordbrukssamfunn, bor i landsbyer med og uten strøm

Landsbyer	Søvn lengde
Med strøm	7.65 timer
Uten strøm	8.02 timer

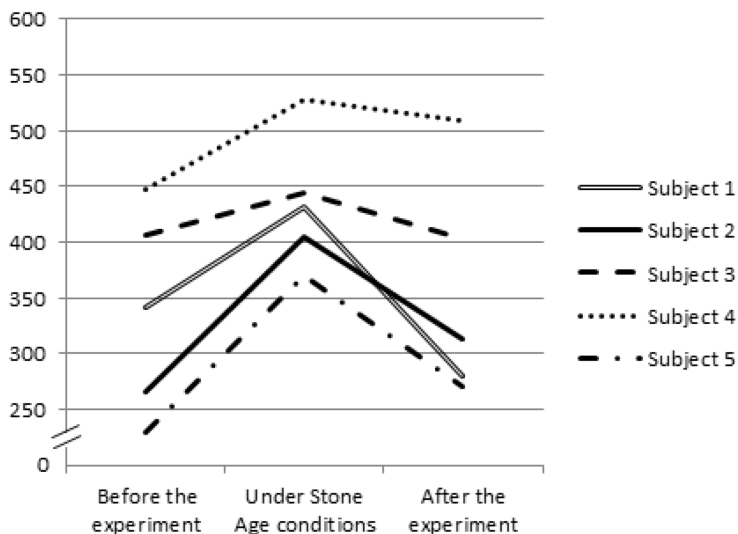


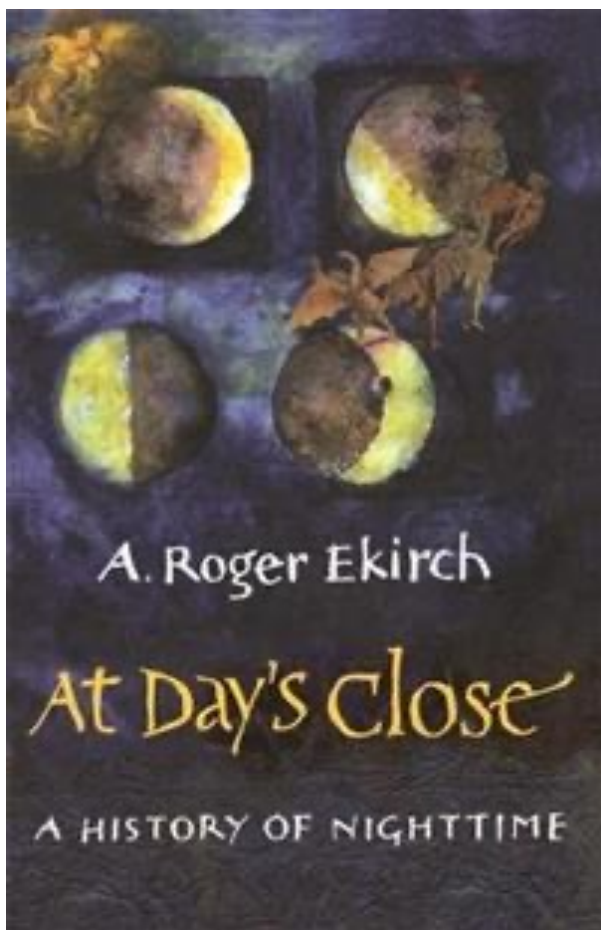
STEINALDERSIMULERING

- 5 voksne bodde i 8 uker i steinalderbosettinger i Constance, Tyskland
- Ikke tilgang elektrisitet, ikke innlagt vann, ikke tilgang mobil, internett eller aviser
- Kun kunstig belysning fra bål/flammer.
- Måtte selv finne/sanke mat



B) Estimated Sleep Time (min)





- Historisk beskrivelse av nattelivet fra middelalderen og til 1900 tallet i Europa
 - Mindre trygghet/sikkerhet om natten (tyveri, overfall, rovdyr)
 - Dårlig sovemiljø (senger, temperatur, mange i samme seng, lopper/lus/insekter)
 - Sov ofte i 2 nattlige bolker, med lengre våkeperiode i midten
 - Sov trolig ikke vesentlig mer enn i dag



SOVER VI NOK?



SLEEP DURATION RECOMMENDATIONS



National Sleep Foundation's sleep time duration recommendations: methodology and results summary

Max Hirshkowitz, PhD ^{a,b}, Kaitlyn Whitton, MHS ^{c,d}, Steven M. Albert, PhD ^d, Cathy Alessi, MD ^{e,f},
Oliverio Bruni, MD ^g, Lydia DonCarlos, PhD ^h, Nancy Hazen, PhD ⁱ, John Herman, PhD ^j, Eliot S. Katz, MD ^k,
Leila Kheirandish-Gozal, MD, MSc ^l, David N. Neubauer, MD ^m, Anne E. O'Donnell, MD, FCCP ⁿ,
Maurice Ohayon, MD, DSc, PhD ^o, John Peever, PhD ^p, Robert Rawding, PhD ^q,
Ramesh C. Sachdeva, MD, PhD, JD, FAAP ^r, Belinda Setters, MD ^s, Michael V. Vitiello, PhD ^t,
J. Catesby Ware, PhD ^u, Paula J. Adams Hillard, MD ^v

- ^a Department of Medicine, Baylor College of Medicine, Houston, TX
- ^b Division of Public Mental Health and Population Sciences, School of Medicine, Stanford University, Stanford, CA
- ^c National Sleep Foundation, Arlington, VA
- ^d Department of Behavioral and Community Health Sciences, Pitt Public Health, University of Pittsburgh, Pittsburgh, PA
- ^e Geriatric Research, Education and Clinical Center, VA Greater Los Angeles Healthcare System, Los Angeles, CA
- ^f David Geffen School of Medicine, University of California Los Angeles, Los Angeles, CA
- ^g Department of Developmental and Social Psychology, Sapienza University, Rome, Italy
- ^h Department of Cell and Molecular Physiology, Stritch School of Medicine, Loyola University Chicago, Maywood, IL
- ⁱ The University of Texas at Austin, Austin, TX
- ^j University of Texas Southwestern Medical Center at Dallas, Dallas, TX
- ^k Division of Respiratory Diseases, Boston Children's Hospital, Harvard Medical School, Boston, MA
- ^l Clinical Sleep Research, Section of Pediatric Sleep Medicine, Department of Pediatrics, The University of Chicago, Chicago, IL
- ^m Department of Psychiatry and Behavioral Science, Johns Hopkins University School of Medicine, Baltimore, MD
- ⁿ Division of Pulmonary, Critical Care and Sleep Medicine, Georgetown University Hospital, Washington, DC
- ^o Stanford Sleep Epidemiology Research Center, Division of Public Mental Health and Population Sciences, Stanford University, School of Medicine, Palo Alto, CA
- ^p Department of Biology, Carleton University, Ottawa, Canada
- ^q Department of Cell and Systems Biology, University of Toronto, Toronto, Ontario, Canada
- ^r American Academy of Pediatrics, Elk Grove Village, IL
- ^s Iqigene Genetics, Bobby Rex VAMC, Department of Internal Medicine and Family & Geriatric Medicine, University of Louisville, Louisville, KY
- ^t Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA
- ^u Division of Sleep Medicine, Eastern Virginia Medical School, Norfolk, VA
- ^v Department of Obstetrics and Gynecology, Stanford University School of Medicine, Stanford, CA

ARTICLE INFO

Article history:
Received 23 December 2014
Received in revised form 24 December 2014
Accepted 24 December 2014
Available online xxx

Keywords:
National Sleep Foundation
Sleep sufficiency
Sleep adequacy
Sleep by age
Lifespan sleep
RAND/UCLA Appropriateness Method
Sleep time recommendations
Sleep duration

ABSTRACT

Objective: The objective was to conduct a scientifically rigorous update to the National Sleep Foundation's sleep duration recommendations.

Methods: The National Sleep Foundation convened an 18-member multidisciplinary expert panel, representing 12 stakeholder organizations, to evaluate scientific literature concerning sleep duration recommendations. We determined expert recommendations for sufficient sleep durations across the lifespan using the RAND/UCLA Appropriateness Method.

Results: The panel agreed that, for healthy individuals with normal sleep, the appropriate sleep duration for newborns is between 14 and 17 hours, infants between 12 and 15 hours, toddlers between 11 and 14 hours, preschoolers between 10 and 13 hours, and school-aged children between 9 and 11 hours. For teenagers, 8 to 10 hours was considered appropriate; 7 to 9 hours for young adults and adults; and 7 to 8 hours of sleep for older adults.

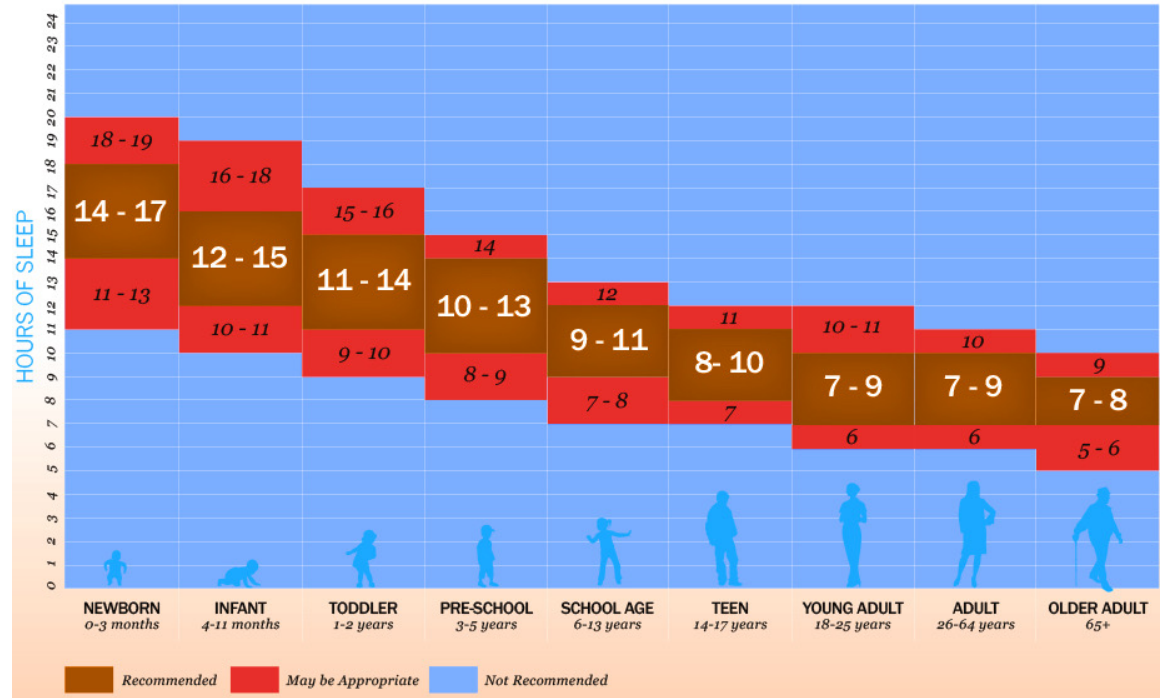
Conclusions: Sufficient sleep duration requirements vary across the lifespan and from person to person. The recommendations reported here represent guidelines for healthy individuals and those not suffering from a sleep disorder. Sleep durations outside the recommended range may be appropriate, but deviating far from the normal range is rare. Individuals who habitually sleep outside the normal range may be exhibiting signs or symptoms of serious health problems or, if done voluntarily, may be compromising their health and well-being.

© 2014 National Sleep Foundation. Published by Elsevier Inc. All rights reserved.

* Corresponding author at: Scientific Affairs and Research, National Sleep Foundation.
E-mail address: kwhitton@sleepfoundation.org (K. Whitton).

http://dx.doi.org/10.1016/j.sleh.2014.12.010
2352-7218/© 2014 National Sleep Foundation. Published by Elsevier Inc. All rights reserved.

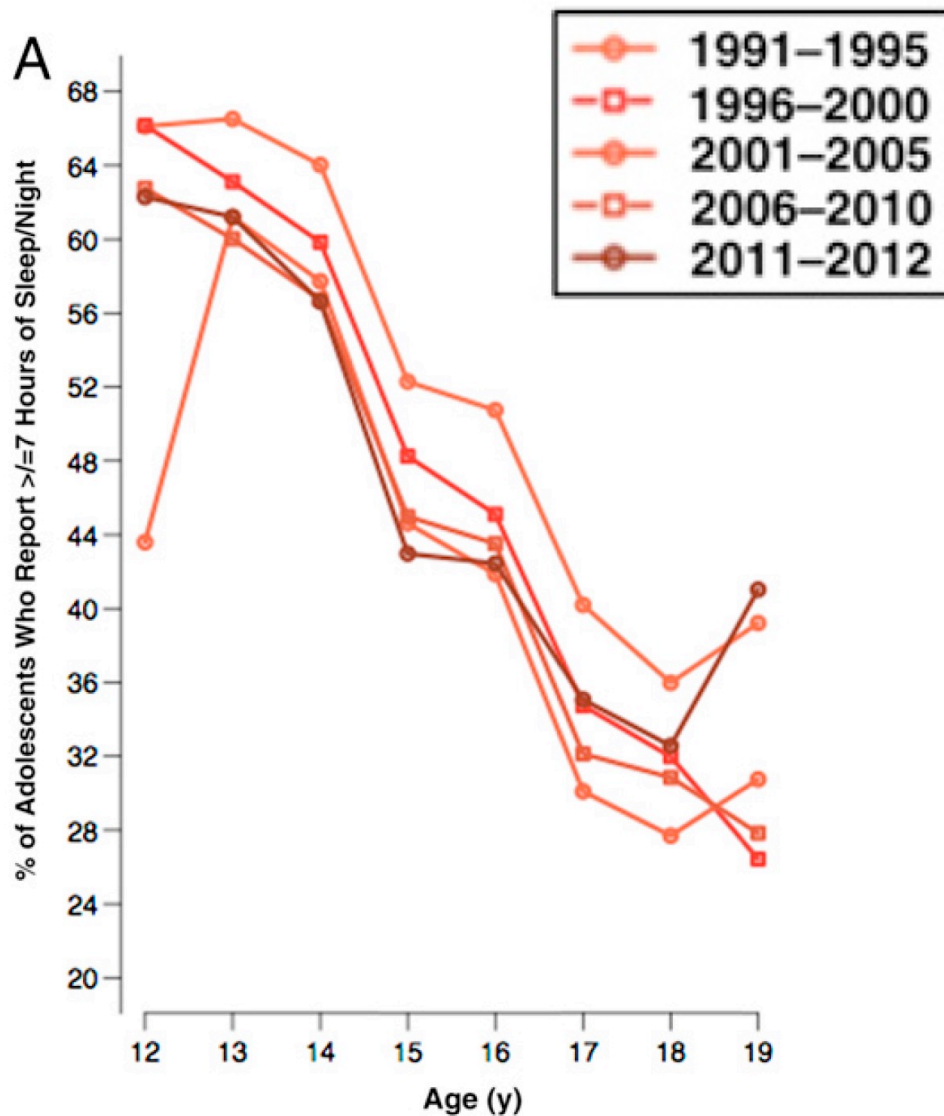
Please cite this article as: Hirshkowitz M, et al. National Sleep Foundation's sleep time duration recommendations: methodology and results summary, Sleep Health (2015), http://dx.doi.org/10.1016/j.sleh.2014.12.010





- Data fra gjentatte representative undersøker (fra 1991 til 2012) blant ungdom i USA

- Andel som sover 7 timer eller mer hver dag eller nesten hver dag

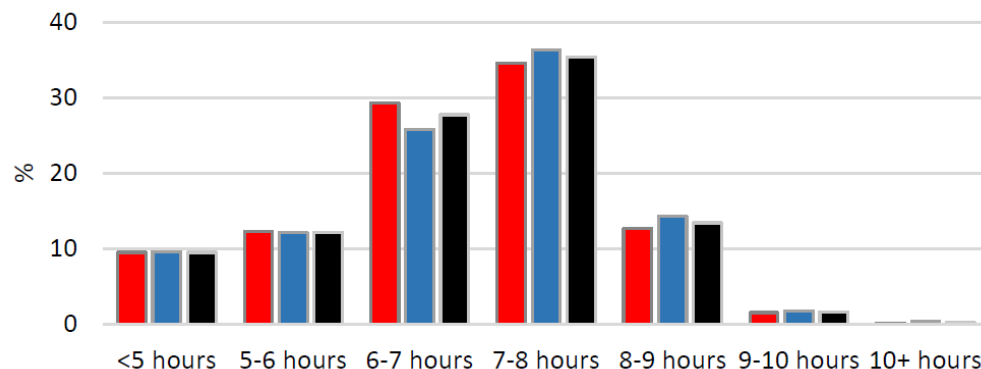




- Data fra 4010 elever i 1. klasse på videregående (16-17 år) i Hordaland og Rogaland samlet inn 2019

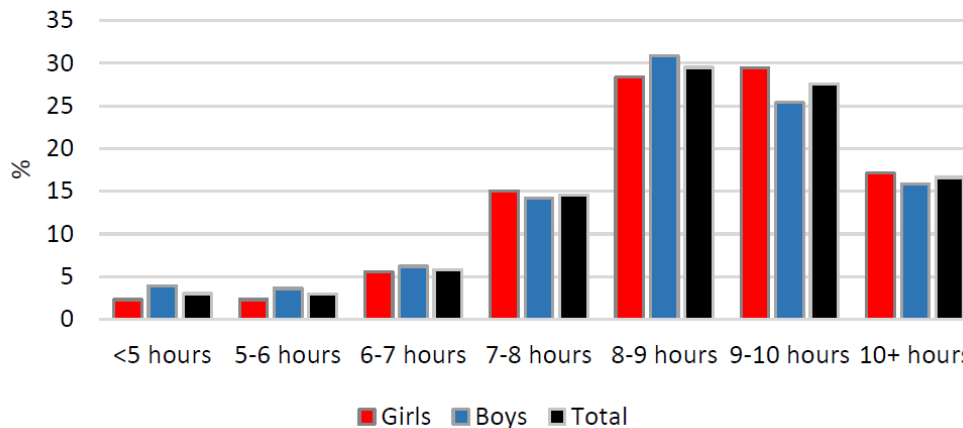
Søvnlengde skoledager

6:43



Søvnlengde helger

8:38





KONKLUSJONER

- Ungdom sover kortere i dag enn for 100 år siden
- I gjennomsnitt sover ungdom kortere enn det som er anbefalt

- Voksne i dag sover trolig uendret sammenliknet med tidligere
- I gjennomsnitt sover voksne i nedre del søvnlengdeanbefalingen