## The Truth About Sleep: Have We Been Getting It All Wrong? [C2]

Sappiamo che il riposo è essenziale per la nostra salute e per il rendimento. Ma, che cosa dice esattamente la scienza su come dormire meglio?



Sleep: those little <u>slices</u> of death, how I <u>loathe</u> them'; 'sleep is a criminal waste of time and a heritage from our cave days.' Quotes like these, somewhat dubiously attributed to Edgar Allan Poe and Thomas Edison, nevertheless reflect our society's difficult relationship with sleep. Attitudes are changing, but there remains a <u>lingering</u> disdain and suspicion. We know we need it, but resent the fact that we have to do it, and are sometimes <u>misled</u> about how to get it. What we can be sure of is that sleep is critical for good health. It helps us form memories and solve problems, allows <u>tissue</u> growth and repair, promotes metabolic health and removes toxins from the brain, including amyloid beta which is linked to Alzheimer's disease. Insufficient and disrupted sleep is now known to result in altered emotional responses such as irritability, anxiety, loss of empathy, impulsivity and a reduced sense of humour. Cognitive performance also takes a hit, leading to a loss of attention, concentration, communication, decision making, creativity, and the ability to multitask. Finally, poor sleep affects

physiological health, leading to an increased risk of stroke, heart attack, infection, cancer, obesity, type 2 diabetes and mental illness. Hopefully this encyclopedic list will convince you that insufficient sleep is so much more than the inconvenience of feeling tired at the wrong time. It should also **prompt** the question: so what is 'good sleep'? We are regularly told that the 'ideal' night of sleep consists of eight uninterrupted hours. But this belief is wrong in so many ways. Sleep is like shoe size. One size does not fit all, and these kinds of **edicts** cause confusion and anxiety for many. The truth is that how long we sleep, our preferred sleep times and how many times we wake during the night vary both between people and in the same person as they get older. Most young and middle aged people (eighteen to sixty-four years) sleep between seven and nine hours each night, but some perfectly healthy individuals may sleep six or even eleven hours. After sixty-four, the average amount of sleep is between seven and eight hours, but the full range can be between five and nine hours. So, sleep shortens as we age. We see the same variety with sleep timing. Your 'chronotype' refers to whether you are a 'lark' (10 per cent of the population), 'owl' (25 per cent of the population), or in between (sometimes called 'dove', representing most of us, at 65 per cent of the population). This is greatly influenced by your biological (circadian) clock. But these clocks change with age. As teenagers and young adults, people tend to have later chronotypes, then move earlier in their middle and older years. What about waking up in the middle of the night? For some reason we have decided that a single episode of sleep without waking ('monophasic' sleep), is normal. But this is almost certainly not the normal state for most of us. Multiple studies have shown that sleep in humans and other mammals often doesn't come in a single consolidated block. Instead, sleep can occur in two episodes (biphasic sleep) or even multiple episodes (polyphasic sleep), separated by short periods of being awake. It seems that our  $^{24}\!\!/_{\!\!7}$  society, the use of artificial light and a reduction in the time available for sleep at night has encouraged us to squeeze sleep into a single episode. Critically, studies have shown that if we wake at night, sleep is likely to return, if it is not sacrificed to social media, worrying or other alerting behaviours. Remember, this may even represent an 'ancestral' pattern of sleep. If you do wake, stay calm, and if you stay awake, don't remain in bed getting increasingly frustrated. Leave the bed, keep the lights low and

engage in a relaxing activity such as reading or listening to **soothing** music. Then return to bed when you are ready for more sleep. Recently, people have been turning to apps to monitor — or perhaps **police** — their sleep. But these are too often sources of misinformation. They come in a variety of different forms, but generally measure a combination of movement, sound, heart and breathing rates, **skin conductance** and temperature. They can be useful in **telling** you **roughly** when you went to sleep, how many times you got up in the night and your total sleep time. This data is then combined by some form of patented algorithm to extract a so-called sleep rating. But measures of the different stages of sleep (REM v NREM, for example) or 'sleep quality' are difficult to assess, and may as a result be profoundly misleading. It's **telling** that no sleep apps are currently **endorsed** by national sleep academies or sleep specialists. Don't take them too seriously and certainly don't worry about a poor 'sleep rating'. Given all of its benefits, you still might want to know whether you are getting good sleep or not. Well, it's not actually that difficult to tell. If you feel you can do what you need to do during the day without significant tiredness, you are probably fine. If, on the other hand, you're dependent on another person to get you out of bed; if you get up late on free days and especially when you're on holiday; if you take a long time to wake up and feel alert; if you feel sleepy and irritable during the day and want to have a mid-afternoon nap; if you feel the need for caffeinated or sugar-rich drinks – these may be signs that you're not prioritising good sleep sufficiently. More seriously, if family, friends, or work colleagues comment that you are more irritable, less reflective and more impulsive, or if you become aware of decreased productivity, increased worry, anxiety, **mood swings** or depression, lack of sleep could be partly responsible. You may need to take steps like drinking less alcohol, eating more healthily, exercising or seeking ways to reduce stress, so that you naturally get better sleep. But remember: sleep is dynamic, and everyone has different sleep **patterns**. Do not be **browbeaten** and bullied by strident commands that you 'must' do this or that. Take possession of your sleep, understand it, **embrace** it and — above all — enjoy it. Published in The Guardian on May 23, 2022. Reprinted with permission.

## **Glossary**

- dove = colomba
- soothing = rilassante
- tiredness = stanchezza
- nap = sonnellino
- embrace = accettare
- slices = fettine, spicchi
- loathe = detestare
- edicts = decreti
- prompt = suscitare
- roughly = all'incirca
- lark = allodola
- to squeeze = comprimere
- patterns = abitudini, modelli
- lingering = persistente
- mood swings = sbalzi di umore
- **owl** = civetta, gufo
- **REM** = con movimenti oculari rapidi (Rapid Eye Movement)
- NREM = senza movimenti oculari rapidi (Non-Rapid Eye Movement)
- to assess = accertare
- endorsed = avallare, appoggiare
- browbeaten = intimidire
- stroke = ictus
- **police** = sorvegliare
- skin conductance = conduttanza cutanea
- **telling** = rivelatore
- misled = confondere
- tissue = tessuti