

#### **OPPORTUNITY #8**

What if we spent more time awake?

# **33 YEARS IN BED**

Advances in circadian biology, neuroscience, the science of sleep and purpose-designed spaces enable higher quality rest and recuperation, leading to improved physical and mental health and a significant boost in productivity.



**MEGATREND** Advanced Health and Nutrition

#### **TRENDS** Digital Therapeutics

Digital Therapeutics Longevity & Well-being Neuroscience

#### SECTORS AFFECTED

Materials & Biotechnology Education Health & Healthcare Media & Entertainment Travel & Tourism Professional Services



## WHY IT MATTERS TODAY

Insomnia and disturbed sleep are increasing. We have noise and light pollution, shift work, 24/7 access to media, constant stress and conditions such as sleep apnoea.<sup>254</sup> Health problems, including weight gain, heart conditions and even certain cancers, have been linked to anxiety and poor concentration.<sup>255</sup> The result is a lower quality of life and well-being which reduces productivity at both individual and collective levels.

Up to 20% of employers worldwide use shift-working patterns to ensure 24/7 production or services.<sup>256</sup> People who used technology in bed before going to sleep scored lower on measures of sleep quality than those who did not.<sup>257</sup> Nearly half of the American adults polled in a sleep health study said they used technology in bed at least once a week and, staggeringly, 30% said they did so every day.<sup>258</sup> Nearly 21% of adults even said that they would check their device before going back to sleep if they woke up during the night.<sup>259</sup>

The sleeping aids market worldwide was valued at \$64 billion in  $2021^{260}$  and is expected to grow at a compound annual growth rate (CAGR) of 7% per year by  $2030.^{261}$  The global wearable sleep tracker market is forecast to be worth \$3 billion by  $2028.^{262}$ 





## **THE OPPORTUNITY**

On average, a person spends one-third of their life asleep. That means, in a typical lifespan, about 26 years are spent sleeping. We also spend seven years just trying to sleep. That adds up to 33 years spent in bed.<sup>263</sup> Advances in circadian biology have implications for the quality and quantity of sleep people are getting. As the field grows in importance, neuroscience, endocrinology and the use of external interventions could improve the way we get our sleep.<sup>264</sup>

Sleep patterns could be optimised by special diets and nano-doses of sleep-enhancing hormones.<sup>265</sup> Body monitoring devices can identify sleep pattern irregularities and suggest treatments to improve sleep.<sup>266</sup> Trans-cranial (i.e. through the skull) technology has the power to bring people into the most restful sleep state in an instant, making it possible to radically reduce the amount of time need for rest and recuperation.<sup>267</sup>

Focusing on creating the best conditions conducive to a good night's sleep— air quality, furniture,<sup>268</sup> windows, doors, paints and space more generally<sup>269</sup>— combined with technology, can result in optimal sleeping experiences.

### BENEFITS

#### **RISKS**

Improved physical and mental health. A boost in productivity and more time to practise hobbies. Unforeseeable risks of interfering with sleep duration over extended periods of time, e.g. triggering mental health issues or physical conditions.





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