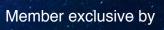
QUARTZ MEMBERSHIP

The future of sleep





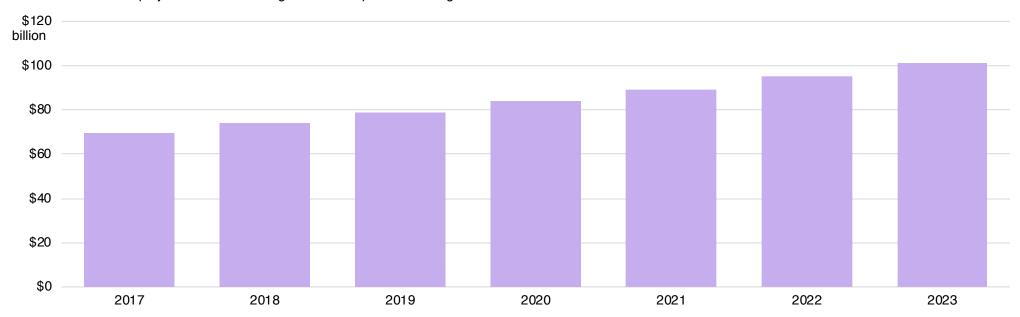
Dasia Moore

The future of sleep

Some 470 startups exist to sell you better sleep. And people around the world are buying in. Sleep aids are a \$70 billion industry, and "sleep health" companies—those that fall outside of traditional medical and pharmaceutical sleep aids—bring in \$30-40 billion on their own. The companies in this new segment trade in everything from mattresses-in-a-box to soothing audio bedtime stories. How did the new sleep industry manage to monetize a basic function of life? And why are consumers buying in?

Projected sleeping aid market size

PS Market Research projects the market will grow at a compound annual growth rate of 6.5% from its level in 2017.



We believe sleep is rapidly becoming the third pillar of wellness and is poised to undergo the same massive transformation that fitness and nutrition have as they became major consumer categories. As the wellness equation increasingly evolves to include sleep, the business of sleep is growing and evolving into what we call the Sleep Economy."

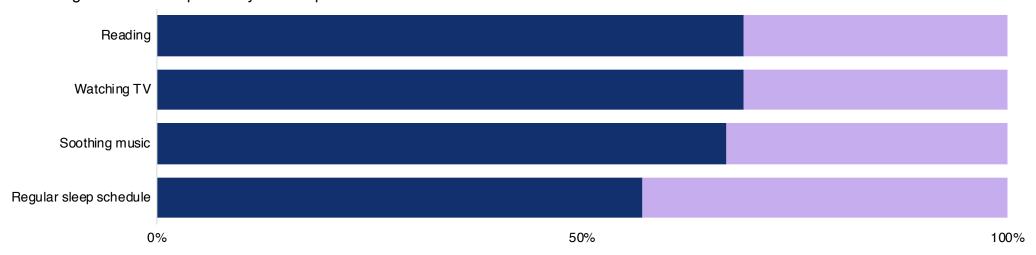
Casper excerpted from the company's IPO registration prospectus

The science of sleep

Our bodies have three chemicals that help regulate our circadian rhythm: adenosine, melatonin, and cortisol. Adenosine and melatonin make your body tired. Cortisol wakes it up. But health conditions can affect our sleep. So can outside factors, like stress, artificial light, and discomfort. What distinguishes the new sleep health industry from its pharmaceutical predecessors is that it mostly focuses on these external factors.

Strategies most adults have used in hopes of improving their sleep

According to a 2019 Philips survey with respondents from 12 countries.



The startups trying to change your sleep

Sleep industry startups generally fall into one of three camps: Mattresses, sleep trackers and bedtime apps, or luxury sleep products. These startups share the sleep industry with traditional bedding retailers, medical sleep equipment manufacturers, and sleep aid pharmaceuticals.















Emma

 Mattress-in-a-box. CNBC reports that there are at least 175 direct-to consumer online mattress retailers. The market for "smart mattresses" alone—beds that measure and respond to sleep patterns—is worth \$1 billion.















• Counting sleep. There's an ever-growing number of apps, bedside devices, and wearables that measure users' sleep. Other bedtime apps help users fall asleep using white noise, music, stories, and stress relief techniques.















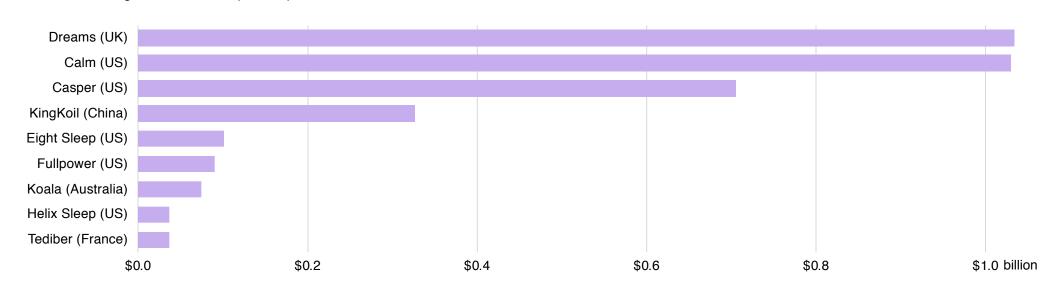
• Luxury sleep products. A quick sample of the other luxe sleep products on the market: robots that cuddle up to their owners, pillows made for "spooning," sleep-inducing baby blankets, pillows complete with a cooling system, rhythmic rocking cradles, wifi-enabled mattress pads, and sleep-mask-headphones.

Sleeping giants

US-based Casper is likely the biggest name in sleep. The mattress-in-a-box company made headlines in 2019 when it reached unicorn status, with a \$1.1 billion valuation. Founded in 2014, Casper led the online mattress craze and has raised \$355 million from 52 investors. But Casper also reflects the sleep industry's vulnerabilities and uncertain future. After announcing it would go public in 2020, Casper slashed its valuation to \$750 million and has struggled to expand its offerings—which now include sheets, wake-up lamps, and \$25 nap pod rentals in New York City—fast enough to fend off competition in an increasingly crowded market.

Leaders of the new sleep industry

Some of the highest valued sleep startups. Valuations from Pitchbook.



Sleep is a luxury, and it will definitely cost you

Sleep is free. Or is it? Getting rest has long been something of a luxury. In the US, people with college degrees get more sleep than those without. Globally, the countries where adults get the most sleep according to Sleep Cycle—New Zealand, Finland, the Netherlands, Australia, and United Kingdom—are also wealthy. The new sleep economy is unlikely to diminish sleep disparities. The cost of luxury sleep items quickly adds up.

How to spend \$5,600 optimizing your sleep

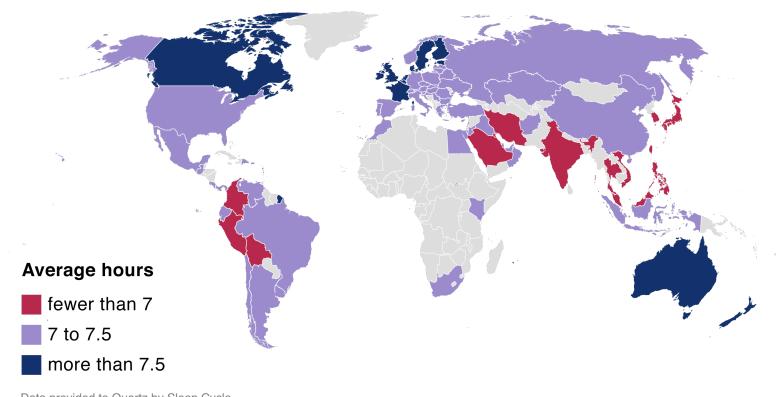


Why now?

It turns out there isn't much evidence showing adults around the world sleep any more or less today than in the past. And North America, where the sleep industry gets nearly half of its revenue, actually gets a better-than-average amount of sleep. So what's behind consumers' willingness to spend big bucks for better sleep?

Nightly sleep duration around the world

Based on data from Sleep Cycle, a sleep tracking app.



The cost of sleeplessness

One reason the world is spending more on sleep is that we know more about how important it is. The traditional wisdom of getting eight or more hours of shut eye each night is old news, but we know a lot more than we once did about the economic and public health consequences of sleeping too little. There is also evidence to suggest that sleep disorders are widespread, meaning that even adults who sleep regular hours might not get quality rest.

20%

The share of serious car crashes that are attributable to driver sleep deprivation

12%
The increased risk of death from all causes for people who sleep less than 5 hours a night

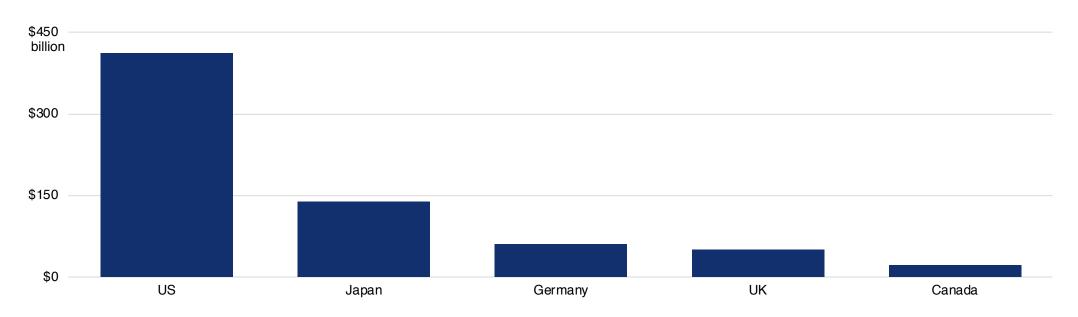
67%
The share of adults who say they wake up at least once during the night

Sleep as productivity

Another trend fueling the rise of sleep startups is a growing tendency to see sleep—and health overall—as one more facet of productivity. A 2016 Rand Corporation study estimated that sleep deprivation can cost OECD countries as much as 2.92% in lost GDP each year. At the individual level, the trend of "biohacking," or measuring and optimizing everything about your body, also offers an explanation for the popularity of sleep tracking devices.

Lack of sleep has economy-wide consequences

Yearly loss of GDP due to insufficient sleep

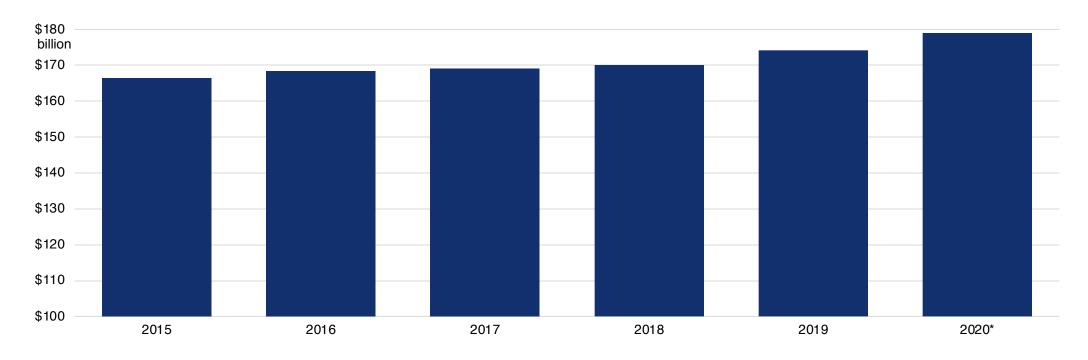


The rise of the wellness industry

The rise of luxury sleep isn't surprising given the rise of wellness as an industry overall. Anxiety about chronic disease, an aging population, and the urge to hack our bodies has created a \$4.5 trillion global wellness economy that promises everything from better skin to better breathing.

US health and wellness market size

Actual values for 2015-2019. Estimate for 2020.



The changing future of sleep

The new sleep industry has been defined by bringing high-tech solutions to our sleep routines. But as research points to blue light-emitting screens as a key culprit in sleeplessness, the future of the sleep industry may depend on simplifying sleep, not complicating it. As Kathrin Hamm, founder of weighted bedding company Bearaby, told Fast Company, "I think we're increasingly coming to understand that technology is partly what is causing us stress and insomnia... Consumers seem to be gravitating toward products that take them away from all of this blue light." One thing is certain: people around the world are still searching for better sleep. And there's no shortage of startups hoping to help get them there.

People around the world are still searching for better sleep

50% of worldwide adults believe better sleep has a major impact on their wellbeing (vs. 41% for diet and 40% for exercise).

45% of 2018 mattress sales were completed online.

69% of US adults have used or could imagine themselves using sleep trackers.

Want to know more? Read Quartz coverage of the future of sleep.

- Casper is making mattress shopping a friendly experience—and it's paying off For background on Casper's (and the sleep industry's) early days.
- Amazon is now a mattress company If you're curious about what happens when Big Tech meets sleep tech.
- One billion people worldwide stop breathing while they sleep For more on the prevalence of sleep disorders.
- <u>Germany's stubborn love for spartan beds made mattress start-up Casper change its own philosophy</u> If you want to know what makes mattress startups different from traditional mattress companies.
- <u>Five scientifically proven ways to fall asleep faster</u> For better sleep that won't cost you a thing.

Have questions about this presentation, or suggestions for us? Send us a note at members@qz.com.