

HERE'S WHAT GETTING LESS THAN 7 HOURS OF SLEEP A NIGHT CAN DO TO YOU

New research found when healthy men in their 20s got only 5 hours of sleep per night, the way their bodies metabolized fat shifted. Rather than evaporating triglyceride-rich lipoproteins that have been linked to the formation of clogging and dangerous fatty plaques in the arteries, their bodies began storing them. Additional research has found the number of people who aren't getting a healthy amount of sleep each night continues to rise. Sleep deprivation over a period of time has been linked to several serious health conditions including hypertension, obesity, diabetes, and a suppressed immune system. Not getting enough sleep — and that's having a significant impact on our day-to-day and long-term health. From mental health to how our bodies store fat, recent research is adding to evidence that illustrates how much sleep deprivation can, and is, impacting our individual and collective health, particularly in the United States. It's been well-documented that getting adequate sleep helps strengthen our immune system and is associated with a decreased risk of cardiovascular and metabolic diseases, including obesity and type 2 diabetes. One such way sleep deprivation hurts us, researchers at Pennsylvania State University suggest, is that it makes us feel less full even after eating a high-fat dinner.

The study, recently published in the *Journal of Lipid Research*, addressed how getting 5 hours of sleep a night, 4 days a week — followed by one 10-hour night of “recovery sleep” — affected 15 healthy men in their 20s. Specifically, how it affected their postprandial lipemia, or the rise of triglyceride-rich lipoproteins that's been linked to the formation of clogging and dangerous fatty plaques in the arteries. What the researchers found wasn't good. “The lipids weren't evaporating — they were being stored,” Orfeu Buxton, PhD, a professor at Penn State and one of the senior authors of the new study, said in a press release.

Experts are still unable to pinpoint exactly why getting enough sleep is a problem, but they say stress from work not only impacts our sleep, but that lack of sleep makes our jobs more stressful. Another recent study by Ball State University researchers found that nearly a third of working Americans report getting 7 hours of sleep or less, a trend they say is getting worse by the year.

The team, lead by health science professor Jagdish Khubchandani, PhD, analyzed 150,000 working American adults from 2010 to 2018. They found nearly 31 percent weren't getting enough sleep in 2010, but that increased to almost 36 percent over the next 8 years. The results were nearly identical for men and women, but some races and professions are getting hit harder than others. “This is a significant finding because the U.S. is currently witnessing high rates of chronic diseases across all ages, and many of these diseases are related to sleep problems,” Dr. Khubchandani said in a statement accompanying the research.

Who gets the least amount of sleep? The researchers at Ball State found African Americans and multi-racial adults saw the largest increases, with each group having more than 45 percent of study participants reporting that they don't get enough sleep. It adds to the racial disparities ingrained in U.S. healthcare. Between 45 and 50 percent of people working in the

healthcare field and the police and military reported being sleep deprived. Forty-one percent of people in transport, material moving, and production occupations reported the same thing. That's of particular concern considering these high-stress jobs often result in life-or-death decisions made in windows lasting only seconds — from avoiding accidents on the road to de-escalating a potentially fatal encounter. It doesn't help that they also typically involve long and odd hours, making a routine sleep pattern more difficult.

Khubchandani said not only is inadequate sleep associated with mild to severe physical and mental health problems, injury, loss of productivity, and premature mortality, but there's no definitively known cause found for why fewer people are getting the sleep they need. "We see the workplace is changing as Americans work longer hours, and there is greater access and use of technology and electronic devices, which tend to keep people up at night," he said. "Add to this the progressive escalation in workplace stress in the United States and the rising prevalence of multiple chronic conditions could be related to short sleep duration in working American adults," he added. Khubchandani said one thing employers can do is take steps to make sure their workers are getting enough rest. "We all suffer when our bus and truck drivers, doctors, and nurses are sleep deprived," he said. And people in the medical field agree. But their busy schedules and long hours make it unrealistic to get enough restorative 7-hour-plus nights of sleep a week. "We're the worst offenders," Dr. Shanon Makekai, chief of pulmonary and sleep medicine at Kaiser Permanente Hawaii, in Honolulu, told Healthline. Makekai says not getting enough sleep can affect the way we think and react, which includes decreased alertness and memory impairment. "Sadly, poor sleep also affects our mood," she said. Over a long period of time, more hours of lost rest increase a person's risk of accidents and an overall poor quality of life, Makekai said. Physically that can translate to not only obesity and diabetes, but also high blood pressure, a suppressed immune system, low sex drive, and an overall chance of death apart from any other medical condition. Mentally that can lead to anxiety, depression, paranoia, and even hallucinations. In children, a lack of sleep can lead to hyperactivity, which could be confused as attention deficit hyperactivity disorder (ADHD).

"For so long we've talked about being mindful of our health with diet and exercise," Makekai said. "Something we take for granted is sleep until we don't get enough." Screen time can also impact sleep. Some of the most common reasons people give Makekai for missing sleep is work and social responsibilities, which include overusing personal technology to stay up to date on social media. Those ubiquitous screens, whether it be phones, tablets, computers, or televisions, emit a blue light that messes with our sleep patterns. "It's harder for the brain to turn off," Makekai said. "Let the mind have time to wind down." It's recommended to avoid those glowing screens an hour — 2, ideally — before bedtime. But using technology by setting a sleep alarm telling you it's time to climb into a comfortable bed in a quiet, dark room are one way to use technology to help you sleep. You can also use a device like a Fitbit to track your sleep patterns. "In the current climate of technology," Makekai said, "we can use it to our benefit rather than our detriment."

Source: <https://www.healthline.com/health-news/lack-of-sleep-affects-fat-metabolism#Screen-time-can-also-impact-sleep>

INDIA HAS TAKEN HISTORIC STEPS TO ENSURE UNIVERSAL HEALTH : MODI

The country is focusing on four main pillars of universal health—preventive health, affordable healthcare, supply side interventions and mission mode intervention, says Modi. Modi says with an increased awareness about cleanliness, possibility of saving hundreds of thousands of lives has also increased. Addressing a high-level meeting on Universal Health Coverage in New York on Monday, Prime Minister Narendra Modi said that his government having a clear focus on health has taken historic steps to ensure affordable health for all. “We have launched the world's largest health insurance scheme Ayushman Bharat for ensuring quality universal health services for all. The summit was held for launching new efforts to provide access for all to affordable, inclusive and resilient health systems.

“World welfare begins with people's welfare, and health is an important component of it. And in line with this global principle, India is laying great emphasis on health,” said Modi. “India has adopted a multi-sectoral approach towards the health sector. The country is focusing on four main pillars of universal health. These are preventive health, affordable healthcare, supply side interventions and mission mode intervention,” he said. Modi said his government's preventive healthcare has important areas of preventive healthcare which are Yoga and Ayurveda. He said that he has recently launched Fit India Movement. “With the help of these systems, we can control lifestyle diseases such as diabetes, blood pressure, depression etc,” said Modi.

Mentioning about Clean India Campaign, Modi said that with an increased awareness about cleanliness, possibility of saving hundreds of thousands of lives has also increased. “In yet another step towards preventive healthcare, we have planned more than 125,000 wellness centres. We are also paying attention on immunization. Along with introducing new vaccines, we have also reached out to areas difficult to reach in our vaccination programmes,” he said. Emphasising on the second pillar of healthcare - affordability, the prime minister said that Ayushman Bharat is a historic step in this direction. “Ayushman Bharat is being implemented successfully. Under this scheme, 500 million poor, have been given the facility of free treatment worth up to Rs5,00,000 every year. The government has also opened more than 5000 public medicine centres (Jan Aushadhi Kendra), more than 800 varieties of medicines are available at affordable prices,” said Modi.

“In our efforts to ensure affordable healthcare, we have slashed the cost of stents by 80% and cut down the cost of knee implants by 50 to 70%. Hundreds of thousands of people are also taking advantage of the free dialysis services provided by the government,” he said. On the supply side, Modi said, India's focus has been on establishment of modern institutions for quality medical education. Modi also mentioned about national nutrition campaign and other new programmes for improving the health of women and children. Modi said that the government has also increased the seats in medical colleges for improvement in health resources.

He stated that while the United Nations has set a deadline of 2030 in its Sustainable Development Goals, for ending the tuberculosis epidemic, the target year that India has set for itself to end TB is 2025.

“With holistic healthcare and for making healthy body, mind and environment, our government has started a campaign against diseases spread due to air pollution and through animals," Modi said. "Access to not just a disease-free life, but to a healthy life is the right of all people, and for this the responsibility is on the government and social institutions to prepare and provide requires services. Under this responsibility, by way of Ayurveda, Yoga and telemedicine, India is increasing access to affordable healthcare to many countries, especially to African countries, The prime minister said.

Modi concluded his address with a Sanskrit proverb 'Sarve Bhvantu Sukhin, Sarv Santu Nirmaya' that translates into “wishing all happiness, wishing all a disease-free life.”

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Source: <https://www.livemint.com/news/india/india-has-taken-historic-steps-to-ensure-universal-health-modi-1569260285941.html>

RISE OF HEALTH - TECH START-UPS IN INDIA AND WHAT THEY ARE SIGNALLING

The healthcare sector in India has always been booming and is one of its fastest-growing sectors. With the amalgamation of technology and healthcare in India, the sector is poised to create new milestones. The way technology has helped transform the other sectors of the country like education and finance, it is proof enough for its potential to positively impact this sector as well.

By 2022, the healthcare market will potentially have a worth of \$370 billion, promising returns up to 35-40%, according to several investors. Health-tech is a game-changer, despite the fact that India has a long way to go when it comes to using technology to impart health-related services. It is expected to generate 40 million jobs by 2030.

According to Traxcn data, in 2018 India's investments in health-tech reached a whopping \$571 million. In April 2019, NASSCOM partnered with GE Healthcare to encourage startups in the field to help boost digital healthcare solutions in the country. Technologies like machine-learning, nanotech, IoT, AI, robotics, 3D printing as just a few examples that have applications in the healthcare industry.

There are about 2,975 startups in India that focus on health-tech. Some of the popular ones are PharmEasy, CureFit, Practo, MedLife, CallHealth, etc. The primary focus of most startups is to improve access to healthcare facilities. This doesn't come as a surprise because the ratio of medical professionals to patients is highly imbalanced in the country. In the allopathy sector, the doctor to patient ratio stands at 1:1596, while WHO recommends that the ratio should at least be 1:1400.

The health-tech startups in India belong to the broad categories of pharmacy, home healthcare, diagnostics, biotech, etc. Let's take the pharmacy and home healthcare sectors as examples to understand the impact of the infusion of technology. According to a McKinsey report, Indians could save about \$10 billion by 2025 through the use of telemedicine instead of doctor consultations that happen in-person.

The rise of health-care startups in India shows that we can soon see the use of genomics, biotech, and robotics in hospitals and clinics to increase the efficiency of health-related services. Artificial intelligence can be used to detect diseases with absolute accuracy while apps that monitor your vitals and movements can help increase the overall wellness of the country.

There are also some red flags that need to be kept in mind when we talk about what the growth of health-tech in India is signaling. With the focus on functionality, there is a risk of security and privacy being ignored. The digital transmission of personal health information can be dangerous.

This is why the field of health-tech needs to be imbued with greater responsibility. Also, how safe is technology in the health field without established protocols, quality-assurance and legislation?

The exponential growth of health-tech startups in India shows that Indians are in dire need of better healthcare and are accepting of it. Technology might finally be able to address the issues plaguing the Indian healthcare industry like quality, reach efficient capital utilization, scalability, affordability, etc. This also shows the massive potential for health-tech startups in India, who can as the bridge that connects needs and wants.

Source: <https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/rise-of-health-tech-startups-in-india-and-what-they-are-signalling/articleshow/71280012.cms>