

Tech never sleeps in quest for better slumber

January 7 2015, by Rob Lever



Attendees at the 2015 International Consumer Electronics Show in Las Vegas, Nevada, on January 6, 2015

This new technology is staying up all night, so you don't have to.

Among the new gadgetry on display at this week's Consumer Electronics Show in Las Vegas are a number of solutions to a problem faced by many: a [lack of sleep](#), or what experts call a lack of "quality" sleep that

allows you to feel refreshed.

Some new devices monitor nocturnal activity to get a better handle on the issue, while others offer aid through techniques such as light and sound.

One of the critical elements is getting good data that can be analyzed, said Terry Duesterhoeft, president of medical equipment group A&D Medical, which works with partners that make wristbands and other devices to collect data during the night.

"We can get a great deal of analytics on sleep quality," Duesterhoeft told AFP on the floor of the electronics show.

By working with partners which crunch these numbers for solutions, "we hope to figure out what to do with this information," he added.

California-based A&D provides an app that monitors activity throughout the day using a tracker, and an upgrade will be able to detect REM or rapid eye movement sleep, seen as an important component of a restful night.

Light, sound solutions

Other products look for a speedier solution to poor sleep habits.

French startup Holi displayed its programmable LED light aimed at inducing sleep for those who need it.

"It's the first solution that combines a color-changing LED lightbulb designed for sleep and a sleep application," said Gregoire Gerard, chief executive of the Lyon-based group.

"The bulb communicates with the smartphone and can be programmed in several ways."



Gregoire Gerard demonstrates a Holi lamp at the 2014 International Consumer Electronics Show in Las Vegas, Nevada, on January 5, 2014

A reddish light helps the user produce melatonin, a hormone seen as important in sleep cycles.

"The next morning, the light switches from blue to white for gentle awakening," he said of the product, which is being sold in Europe and will be available in March in the United States.

The app allows the user to visualize data and get advice for improving sleep.

"You can see what the temperature and noise levels were," Gerard said.

"The more data we have, the more accurate the advice is."

The Aura sleep system from French tech group Withings also on display in Las Vegas uses both gentle light and sound to induce slumber, a "smart" wakeup light that aims for the best moment in the sleep cycle, and a sensor pad that attaches to the mattress to measure heart activity, breathing and sleep cycles.

"The music and light enable you to fall asleep and wake up gently," said Withings product manager Marie Loubiere.

"You get a report every day. So you can see for example if you sleep better when you go to bed at 10:00 pm instead of 11:00 pm."

Another product, RestOn from China-based Sleepace, uses a bed sensor to measure sleep time, heart rate, respiratory rate, body movement and sleep cycles, and offers advice to improve sleep quality.

Family solutions



Attendees lay on mattresses at the Serta stand, January 6, 2015 at the Consumer Electronics Show in Las Vegas, Nevada

Others at the show aim for solutions to help parents track problems with their children in addition to their own sleep.

Paris-based Sevenhugs introduced a system using small transmitters that can be placed in each bedroom to communicate with a controller and app.

The HugOne system monitors temperature and humidity in every bedroom, as well as indoor air quality. It also records sleep data and can interact with smart lightbulbs and thermostats.

The bedding industry is not taking the problem lying down.

Minnesota-based Select Comfort Corp., which makes the adjustable

firmness Sleep Number beds, was at CES to show its new bedding with tracking sensors already built in, which connect to an app, allowing parents to see how their children are sleeping.

"There's nothing to wear, there's nothing to turn on, You just get into bed," said Sleep Number spokeswoman Kelley Parker.

The system "tracks and monitors your sleep and gives you a 'sleep IQ' score" that indicates how restful the night was, Parker said.

"We know one of the biggest things parents struggle with is understanding the quality and quantity of their kids' [sleep](#)," she added.

One more feature of the system, said Parker: it will "scan for monsters" in the room so that children can go to bed reassured.

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Citation: Tech never sleeps in quest for better slumber (2015, January 7) retrieved 26 April 2024 from <https://phys.org/news/2015-01-tech-quest-slumber.html>

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