Daylight Saving Time saves no one

November 5 2019, by Robyn Schelenz

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Feeling a little out of it today? It's no surprise. You can thank Daylight Saving Time.

It may seem counterintuitive that "falling back," as it is called when Daylight Saving Time ends (as it did yesterday, November 3), can make

you feel out of sorts. After all, you got an extra hour of sleep! Who doesn't love that on a Sunday?

But playing with our sleep twice a year has consequences, on our bodies and on our society as a whole, as UC Berkeley sleep researcher Eti Ben Simon tells us in our new Fig. 1 video.

Consider this:

- When Americans gain an hour of sleep at the end of Daylight Saving Time, the risk of heart attack decreases by 21 percent, according to a [University of Colorado study](link). But when Daylight Saving Time begins and we "spring forward," the risk of heart attack increases by 25 percent.
- The switch to Daylight Saving Time was shown by one study to cause over [30 fatal automobile crashes](link).
- A study in Australia (yes, they have it, too) found that extending Daylight Saving Time would reduce the number of koalas killed by cars by 8 percent.

If legislation is anything to go by, Daylight Saving Time isn't even popular, whether you're springing forward or falling back. At least 36 states introduced bills in 2019 to get rid of the [time change](link) and stick to either standard or Daylight Saving Time. California voters agree with that sentiment, and in 2018 a whopping 60 percent voted to allow legislators to consider making Daylight Saving Time permanent.

(Fun fact: California can't make that change unless Congress gets involved, so the legislation is stalled for now.)

Why does Daylight Saving Time get our goat so much? Perhaps it's because losing sleep is even worse for you than you thought.

Sleep: The final frontier

Ben Simon, a researcher at the Center for Human Sleep Science, studies how sleep loss affects our social and emotional behavior.

"I think sleep is the last frontier in human health," Ben Simon says. "So far, we managed to understand the basic requirements for life, like oxygen, food and water and why they are critical to our survival. Yet, sleep still remains a mystery. Sleep evolved hand-in-hand with life on earth and we have not found a living organism that can survive without it. It is one of the foundations of life and it's time we understand this thing called sleep."

You may already know that lack of sleep is linked to high blood pressure , diabetes, Alzheimer's disease, heart attack or stroke, and obesity. What Ben Simon has also found is when we don't sleep, we become antisocial and drive others away.
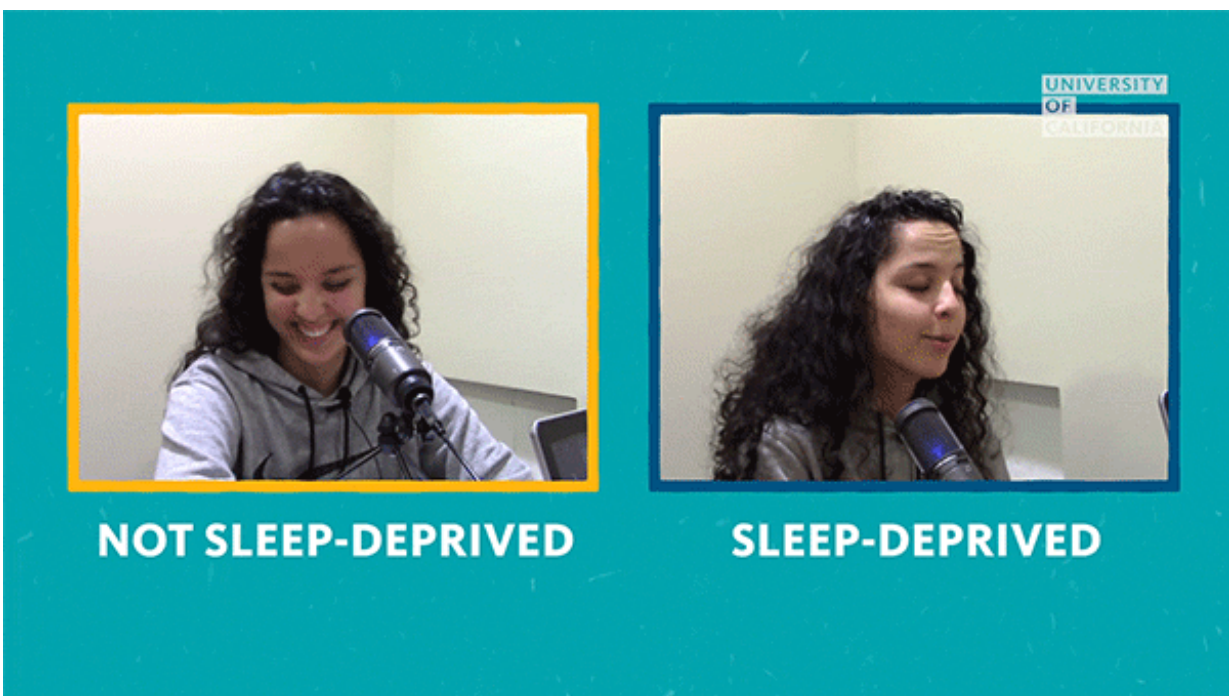
Credit: University of California

Her lab performed an experiment in which they compared emotional and [social behavior](link) in [young people](link) after a night of solid sleep versus staying up all night.

Without sleep, people felt more anxious and depressed, and did not allow others to get as close to them as they did after a good night of sleep. Their sense of personal space was far greater. Even normally outgoing people engaged less. Observers perceived the sleepless students as less healthy, more anxious and less desirable to interact with. It was the same person, just without a night of sleep.

Losing an entire night of sleep may seem like a drastic example. But Ben Simon's lab has found similar effects when we lose smaller amounts of sleep (as we do when cramming for finals, say, or changing the clocks for Daylight Saving Time). Nights of poor sleep led individuals to engage in less social activities and feel lonelier the next day. Ben Simon's lab is concerned with how a lack of sleep can combine with chronic stress and loneliness to snowball into a particularly unvirtuous cycle: loneliness makes it hard to sleep, and not sleeping makes us lonelier.

Ben Simon believes sleep is essential for our health, and needs to be treated as such for a better, healthier society.

"I think that change has to come from people demanding the right to sleep and not being embarrassed they need eight hours of sleep," she says. "And from policymakers and governments and employers that really care about the well-being of citizens to start promoting sleep."

When Daylight Saving Time was first introduced in World War I nobody ever thought about how it might affect human health and sleep loss. It was intended to help the country burn less coal and conserve energy. But today it's clear that it triggers massive sleep loss—and related ill effects—on nearly 1.6 billion people twice a year.

Going to bed earlier or making other adjustments to "catch up on sleep" don't really fix the problem, Ben Simon says. That's because we often struggle to adjust to any change in our sleep pattern. In a chronically sleep-deprived society, disruptions like Daylight Saving Time just make the problem worse.

"I think it's kind of ironic that in trying to catch up on sleep, you know, come Sunday night, you might actually lose more sleep than you've earned, because once you change the timing you also change the duration," Ben Simon says. Going to bed at the same time and sleeping for the same duration are important to our overall health. A time change is not conducive to that.

"We don't have any sleep reserves to lose," Ben Simon says. "There's a lot of evidence we should let go of Daylight Saving Time, it is a thing of the past."

In fact, it might be time for society to consider being more flexible about our school and work start times, too. California has taken the first step by enacting legislation earlier this year to make sure middle and high school starts no earlier than 8:30 a.m. That might eventually mean letting parents clock in later, too.

So do yourself a favor, and make sure you get your sleep. Daylight Saving Time will come and go (and may one day be gone for good) but your internal clock is going nowhere—and knows what's best for you.

How to get in tune with your internal clock:

- Tune out noise about sleep. Sleeping 9 hours is perfectly normal, not lazy, and 9 to 10 hours is actually what's recommended for adolescents (today only 30 percent of adolescents actually get the sleep they need).
- An hour before bedtime, dim the lights and turn off all electronic screens and devices. Blackout curtains are helpful.=
- Allow for at least 8 hours of sleep every night. Your actual sleep duration might vary slightly from night to night but 8 hours is a good marker to aspire to.
- If you want to get more regular in your sleep, use your next vacation to try a sleep-reset protocol. Avoid caffeine and alarm clocks for a week and go to sleep as soon as you feel sleepy. Once you find the earliest time you can easily fall asleep and still get all the sleep you need, stick to that pattern as close as you can, weekdays and weekends.
- Go to bed and wake up at the same time every day, even after a bad night's sleep or on the weekend. Don't try to "catch up" on sleep during the weekend or by "falling back" at the end of Daylight Saving Time. Sticking to a regular sleep schedule will help you maintain a consistent sleep duration and keep you in tune with your internal clock.

Provided by University of California