# Sneaking in Shut-Eye

It feels good to catch some z's whenever-and wherever-you can. But is it healthy? **BY DIANA KELLY LEVEY** 

# NAPPING: Does It Do You Any Good?

Find out whether a mini snooze will give you the energy you need.

NAPPING. THE MERE mention conjures up an image of getting cozy under the covers in bed or reclining on the couch and enjoying a respite from the day to replenish energy lost.

While many of us haven't taken a proper nap since we were children, napping could have mood and health benefits when done properly and at the right time of day.

"Napping itself is not necessarily unhealthy," explains Ryan Donald, Ph.D., assistant professor at Ohio State University Wexner Medical Center. "Most people probably don't need to nap if they're getting good quality sleep at night, but there is nothing inherently wrong with it." Someone who suffers from insomnia issues should avoid napping during the day, he adds.

Here's everything you need to know about taking the perfect nap.

**Getting Enough Hours** We all have a sleep drive that builds throughout the

**SLEEP EXPERTS RECOMMEND DRINKING A CAFFEINATED BEVERAGE BEFORE TAKING A 15-MINUTE NAP** SO THE CAFFEINE KICKS IN WHEN YOU WAKE UP.

Napping helps you feel more alert-and generally, when you're more alert, you are able to do your job and concentrate better. Taking a nap can also improve motor performance, meaning you'll probably be more coordinated in that evening workout class and more alert and cognizant while driving home from work. Other research points to napping as a way to boost memory and learning; I

day-and if it gets cut down because of napping, that makes it harder to go to sleep at night in many cases, Donald says.

"Napping can be a part of [the recommended hours daily], but ideally sleep would occur as part of a continuous sleep period at night," offers Nathaniel F. Watson, M.D., director of the University of Washington Medicine Sleep Clinic and a SleepScore Labs advisory board member.

"You experience a progression through various stages of sleep that repeats itself through the course of your sleep at night," Watson says. "When you nap during the day, you may not be able to go through these complete cycles at night. The sleep architecture you're obtaining if you are supplementing it with naps during the day would not be the same as if you had a continuous, healthy sleep on a nightly basis."

## **Dozing Benefits**

# **Snooze Stats**

10 minutes: The nap length that produced the most benefit in terms of reduced sleepiness and improved cognitive performance, according to research in the journal Sleep.

1/3: The portion of U.S. adults who nap on a typical day, according to 2009 data from the Pew Research Center.

\$13,000: Approximate cost of napping chairs manufactured by MetroNaps that are designed for office use.

6: Approximate percentage of employers that have nap rooms on-site.

**Companies with nap rooms:** Google, Uber, Zappos, Capital One Labs, The Huffington Post, Ben & Jerry's and PwC.

know that when I feel "brain dead" or "fried" from a long day of writing and work, an afternoon snooze makes me feel better and helps me meet work deadlines.

### When to Nap

Many people experience a circadian rhythm dip around 2 p.m. "You'll naturally get a little sleepier at that time, so some people nap to help get through that," says Donald.

When you nap too close to your bedtime, you're taking away the sleep drive that was building all day, and you'll need to build it back up, he adds. That's one way napping can cause sleep issues.

## SLEEP SOLUTIONS

But if you're someone who doesn't have issues falling asleep, staying asleep and waking up naturally, you can sleep whenever you want during the day, says Donald.

## What Happens

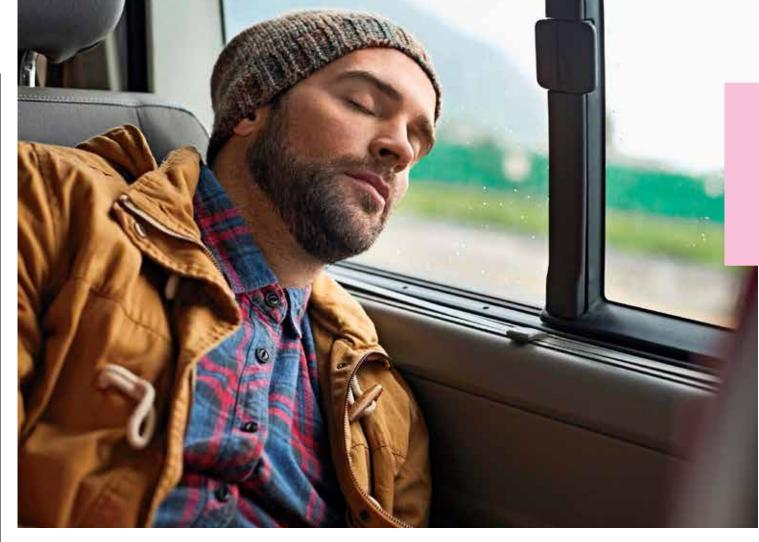
The ideal nap seems to be in the 15-minute time frame, according to experts. You want to get enough sleep to take away some of that sleep drive and feel well-rested but not fall into such a deep sleep that you have to wake up out of it. Anyone who's ever been woken from a nap when they've slept too long and felt out of it, cranky and lethargic afterward knows what we're talking about.

"When you take a longer nap, 60 to 90 minutes, you risk waking up out of a deeper stage of sleep—N3 sleep," says Dr. Watson. "When that happens, it's difficult to get your wits about you. You can be groggy, a bit disoriented, and feel a bit fatigued when you wake up out of that sleep stage."

## Don't Use Napping as Your Sleep Band-Aid

You should not try to compensate for a bad evening habit, like staying up all night watching TV shows and depriving yourself of sleep and then trying to catch up by napping during the day. "It's not the optimal situation ... but again, if you slept four hours a night and then wanted to sleep four hours during the day to get those eight hours in-it's not optimal, but it's acceptable," reveals Donald.

Ideally, he adds, aim to get the amount of sleep you need at night, so you won't need to nap during the day.



# How to Fall Asleep Anywhere

Employ these simple tricks when you're away from home.

WHEN YOU SPENT A night sleeping away from home, you probably experienced what's called acute insomnia, being unable to sleep well because you were in an unfamiliar environment.

In 2017, U.S. travelers took 1.8 billion trips for leisure travel and 462 million domestic business trips. That means there were a lot of sleepless nights for those in unfamiliar beds.

We talked to Donna Arand, Ph.D., president of the Society of Behavioral Sleep, in Dayton, Ohio, as well as frequent travelers for tips for better slumber anywhere.

# On a Plane

Arm yourself before you step foot near the airport. Book a roomier seat, if possible, or the window seat so you can lean on it, suggests Arand. Make sure that you have a neck pillow, eye patches and headphones or earplugs.

"T'm a light sleeper who very much likes routine, familiarity and the comforts of home," says Beth Daigle, author of *Musing Mediterranean: Fun, Family, and Faraway*  Places Transform an Anxious Traveler (WiDo Publishing, July 2018). "Travel introduces a great deal of disruption in my sleep patterns." She arms herself with the right tools

to help her snooze. "If I am traveling by airplane and need to sleep, I've been pleasantly surprised by the benefits of noise-canceling headphones," Daigle says. "I once balked at the expense, until I tried them and found the quieting effect extremely soothing. Blocking out bothersome sounds introduces an isolating, cocoonlike feeling that helps me drift off to sleep."

New York-based freelance writer Lavanya Sunkara used melatonin strips on a flight to Thailand. "They were a lifesaver. I was able to fall asleep on a 11-hour flight, with no problem, after taking one strip. I must have slept for seven hours. Because I slept, I arrived a bit more refreshed than usual," Sunkara says. (But

DRINK LOTS OF WATER WHILE TRAVELING; DEHYDRATION CAUSES FATIGUE.

> make sure to speak with your doctor about taking any supplements first, because you need to know what dosing is right for you. Also, if you're asleep for long periods of time, it may make you more susceptible to deep vein thrombosis.)

Another tip from Sunkara is to set your watch to the destination's local time zone and try to stay awake as much as possible during the daytime: "That helps my body adjust to the new time zone."

## On a Bus, on a Train or in a Car

As many of us have experienced during commuter travel, a short nap en route may help you feel refreshed when you arrive at your destination. Use your headphones to

play something quiet and relaxing or white noise and slip on a sleeping mask.

"Whatever you can do to

# **Progressive Relaxation Can Help**

Starting with your legs and feet, tense them up, making them stiff, and hold for a few seconds and then release, suggests Donna Arand, Ph.D. Then do the same with your arms and upper torso. Tense each body part, hold that tension and then release the muscles and relax. Then do that with your face—tense and then release. Doing this tension-versus-relaxation technique will help you release any physical tightness.

"In terms of relaxation, which is what you want in order to fall asleep, when you increase muscle tension, you activate a lot of receptors and change the neurochemistry in the muscle. Then you release it, so you get this drop in chemicals—and the muscles relax," says Arand.

72 / SCIENCE OF SLEEP

shut down sensory input can help," suggests Arand. "Similar things apply...just as we covered in traveling on an airplane."

It also helps to get as comfortable as you can, so wear layers that you can easily put on or take off and slide off your shoes. Of course, it's hard to find a good resting position, so it may be worth investing in a neck pillow for the ride.

## In a Hotel Room

When you're out of your normal environmentlike in a hotel room-you may experience situational insomnia, says Arand. Get a room away from noisy elevators; if your room is loud due to external factors, ask to move to another space. Have a routine that mimics the one you follow at home-use the bed only for sleeping, not for working, eating or watching TV. "Good sleep-hygiene principles can really help," explains Arand. "And that means trying to keep your sleep time and wake time consistent."

One of my friends travels for work frequently and brings two sets of pajamas one if her hotel room is cold and another if it's warm—so she has options. If you can't bring a pillow with you, Daigle suggests bringing a pillowcase from home to use. This trick always helps her fall asleep.

# Follow These Tips on the Day of Travel

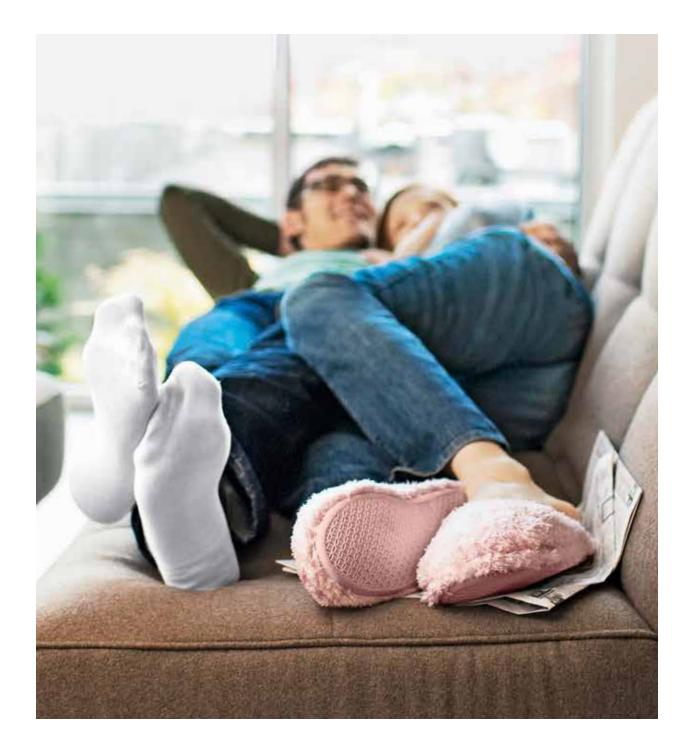
Expose yourself to light. Traveling westward tends to be easier on your circadian rhythm (the internal body clock). Get outdoor light exposure in the late afternoon or early evening. Traveling eastward? Get light exposure in the late morning and early afternoon to shift your rhythms closer to your destination's time zone, according to Johns Hopkins School of Medicine.

#### Work in some exercise.

When adjusting to a new time zone, exercise has been found to help with time-change adjustments and may speed up your body's return to its normal circadian rhythm. Go for a long walk-in the sunlight if you can-to help your body adjust to the different time zone while seeing your new surroundings. Even if you're in the same time zone, carve out time to get moving. One study found that people who exercised at least 150 minutes per week slept better and felt more alert during the day.

#### Take a warm shower.

This can help you de-stress, says Donna Arand, Ph.D. The warmth helps muscles relax, reduces physical tension and your body temperature will drop afterward. That shift from a higher body temperature to lower mimics a trigger that naturally occurs when you're falling asleep.



# Can You Really Catch Up on the Weekend?

Will logging more hours of sleep on your day off undo the damage done on workdays?

AH, THE WEEKEND. IT'S the time we look forward to as we pound the snooze on our alarms and grumble about having to start the day earlier throughout the week. We spend Monday

74 | SCIENCE OF SLEEP

through Friday thinking of those blissful hours when we might be able to get more shut-eye, lie in bed under the covers just a little bit longer and wake up feeling rested—we hope.

While many of us think we can catch up on sleep on the weekend, I sought out experts' takes on whether it's true or if it's just a perception that we can get enough sleep

to make up for all our weekday sleeping sins. There's a term for what many of us are doing every week. "Social jet lag" is when you go to bed later on the weekends and

wake up later than you do during the week. While it might feel good to sleep in on a Saturday, research suggests that changing up our sleep patterns in this way on the weekends is linked to poor health, bad moods and increased sleepiness and fatigue.

A recent study compared the weekday and weekend sleep habits of 38,000 people in Sweden and found that overall total sleep for the week might be able to offset not sleeping well each night.

According to the study results, people under the age of 65 who slept for five hours or less every night didn't live as long as those who consistently slept seven hours a night. But those who slept for fewer than the recommended seven hours each weekday and then caught an extra hour or two on Saturdays and Sundays lived just as long as people who always slept seven hours, reported the study's authors. Although the

conclusions sound promising, experts say that more research is needed.

We consulted Nathaniel F. Watson, M.D., director of the University of Washington Medicine Sleep Clinic and a consultant at SleepScore, and Darria Long Gillespie, M.D., an ER doctor on faculty at Erlanger Hospital **Emergency Medicine** and the author of *Mom* Hacks (February 2019) to determine whether it's a healthy practice to make up for lost sleep on the days we have off from work by sleeping in.

"There is no greater giveaway that someone is sleep-deprived than a large discrepancy in sleep duration between work, sleep before workdays and sleep on weekends," explains Dr. Watson. "Not getting enough sleep is a huge problem, and it has implications for nearly every aspect of human health." "It contributes to the

development of obesity, diabetes, cardiovascular disease, mental health issues [and to] motorvehicle accidents, and it reduces cognitive performance," he adds. "The problem is, the more sleep-deprived you are, the less you're able to assess your level of impairment."

Simply put, you think you're getting by on the short sleep you've had all week, but mentally and physically, you're suffering-and you might not even realize it until it's too late like having a slowerthan-usual reaction time while driving.

Poor sleep during the week and sleeping in on a day off happens to all of us every once in a while. And that's okay, says Dr. Long Gillespie. "Sleep is like a [financial] balance, kind of like having a 401(k). So if you say, 'I'm going to deprive myself of sleep during the week and then I'm going to catch up on the weekend,' it's kind of like saying, 'I'm not going to put any money in my 401(k) all year, but then I'll throw some money in once a year. Is your 401(k) going to do better than if you didn't contribute anything? Sure, but you're not going to get the true benefit of adding to it on a regular basis."

The same goes for sleep.

**EACH HOUR OF SOCIAL** JET LAG IS LINKED **TO AN 11 PERCENT INCREASE IN THE** LIKELIHOOD **OF HEART DISEASE.** certainly moving you in the right direction," adds Dr. Watson. But that sleep debt you're building up throughout the week is typically not going to be

completely remedied in two periods of sleep extension on Saturday and Sunday. Maintaining a regular bedtime and waking schedule-adjusting to within an hour or so on the weekends compared to during the week-is one of the best ways you can keep your body clock operating at peak performance. That way, you're able to fall asleep when you want to, both during the week and on your days off.

The reality is, if you are regularly shorting yourself on sleep during the week, you're going to be throwing off your circadian rhythm. "Our circadian rhythm doesn't just govern our sleep-it governs everything from metabolism to repair of our cells," explains Dr. Long Gillespie. "If you are staying up late during the week and then trying to sleep longer on the weekend, you're slapping your circadian rhythm around. You're going to see side effectsnot just in your sleep but in your overall health.' "So yes, catching up on sleep on the weekend is

# Discovering Your Sleep **Needs on** Vacation

It's no secret that many of us try to get more sleep on vacation than during our workweekbut you might also be able to get better-quality sleep. A small study by New Zealand Air found that after two to three days of vacation, study participants were averaging an hour more of good-quality sleep and experienced an 80 percent improvement in their reaction times. Those reaction-time improvements carried through after they returned home, the study author reported.

Use a leisurely vacation to learn about your body's sleep needs. If you go to bed when you're tired at night and wake up without an alarm for a few days. you'll have a better sense of how much time your body needs daily, suggests Nathaniel F. Watson, M.D.: "Do this on vacation or during an extended [break of] a few weeks, and typically you can get yourself back to normal." When you return from vacation, prioritize sleep for one month, he suggests. Most people will realize the positive impact it has on their health, wellbeing, relationships and job performance.