

# Dreaming of sleep

We all have ways of dealing with jet lag, but what are the long-term effects of sleep deprivation and how are travel companies trying to help?  
Sally Brown investigates





**T**iredness comes with the territory when you travel for business, but new research points to long-term consequences for physical and psychological health and well-being when we regularly miss out on quality sleep.

On average, we sleep for two hours less than we did in 1960 and, according to a recent survey commissioned by insurer Direct Line, 48 per cent of us say we need eight hours of sleep but two-thirds of us only get six. Many frequent travellers get much less than this.

In the short term, a lack of sleep affects your ability to concentrate and make decisions, and renders you more irritable. Your family and colleagues often bear the brunt of that. In the longer term, it puts you at risk of several serious diseases.

"When you travel frequently, you undermine two aspects of your sleep cycle – your sleep homeostat, which regulates the drive to sleep, and the body clock or circadian rhythm," says Professor Jason Ellis, head of the Centre for Sleep Research at Northumbria University.

New research from the University of Surrey has found that living out of sync with your body clock affects the activity of more than 700 genes, disrupting several metabolic processes, including how we respond to stress and the ability of cells to regenerate. This may help to explain why regular disruption to sleep increases your risk of depression, as claimed by the University of Washington Medicine Sleep Centre, and puts you at higher risk of cancer and heart disease, as proven by a wealth of research.

Scientists at the University of Chicago found that after only a few days of cutting back to four hours' sleep a night, people struggled to process glucose in a similar way to the early stages of diabetes. "Forcing your body to function when it's supposed to be asleep puts it under tremendous strain," Ellis says. "We know from studies on shift workers that it can lead to serious health problems."

One of the latest discoveries is that sleep "detoxes" the brain. According to recent research from the University of Rochester Medical Centre in New York, sleep helps to flush out waste products such as amyloid-beta, the protein that has been linked with Alzheimer's disease.

Thankfully, companies are finally taking the issue seriously, says sleep physiologist Dr Guy Meadows, clinical director of the Sleep School (thesleepschool.org) and author of *The Sleep Book: How to Sleep Well Every Night* (Orion). He says: "We've still got a long way to go to create the cultural shift we need to fully appreciate the importance of sleep. But when we speak to HR departments of top companies, improving the sleep of employees is now as important as reducing stress – and the two tend to go hand in hand."

Meadows runs a programme called "Sleep to Perform", which provides company-wide sleep need assessments, seminars, webinars, and one-on-one coaching for those staff who need it most. It's no surprise that they are often frequent travellers. Martin Sinclair, a contributor to our online forum (businessstraveller.com/discussion), writes: "Sleeping problems have affected me for the past 30 years of travel. My solution up until April 2013 was to take sleeping pills, which I fortunately recognised as being a serious problem. I kicked the pills 100 per cent and now conquer sleep problems with yoga."

Ellis says the problems can continue when you get home. "It can take as little as two weeks of disrupted sleep to trigger a long-term sleep disorder," he says. "So even at home, you wake up in the night or find it hard to drop off."

What can you do if your job is ruining your sleep? According to the Economic and Social Research Council, one in ten people in the UK take sleeping pills regularly. Meadows says: "People who come to the Sleep School have had insomnia problems for ten years on average and I'd say 90 per cent have tried five or six types of medication to help them sleep. The catch-22 is that they become dependent and feel they can't sleep without them, even though they realise they're not sleeping well." Last year, a University of California study found that even occasional use was as bad for your health as smoking, raising the risk of early death at least 3.6 fold.

Meadows doesn't think sticking to a "wind-down" routine helps. "Sleep is a natural physiological process that can't be controlled, and relying on unnatural night-time rituals or

props – such as warm baths, pills and alcohol – can fuel sleep anxiety. You can lie there thinking: 'I've had my bath and done my deep breathing and still can't sleep, so what's wrong with me?'"

It makes sense, he says, to avoid late-night caffeine and alcohol consumption, and to try to go to bed and get up at roughly the same time every day (travel permitting). But acceptance is key – the irony being that it's only by giving up the struggle to sleep that we are able to sleep better. "It's about changing your relationship with your thoughts about sleep," he says. "Rather than trying to control your anxiety about lack of sleep, allowing it to be there allows it to pass."

Meadows says labelling your thoughts ("there's that old fear that I won't be able to cope tomorrow") allows you to step back from

them, rather than allowing them to affect you. "Most clients resolve their sleep problems within three months," he says, although he points out that once you have them, you tend to have them for life. He explains that insomnia remains in the memory like anxiety does, so during a heatwave, for instance, you'll be affected more than most as it can trigger your old thoughts and beliefs.

Making an effort to upgrade your sleep is an investment in your health and mental well-being, both now and in the future. There's also another welcome pay-off – you'll become more efficient. As Meadows puts it: "Sleep is still the most under-rated performance enhancer out there."

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## INDUSTRY INITIATIVES

**Hotels and airlines are fast recognising the importance of sleep to their customers. Here are some of the ways they are trying to improve your rest.**

### BETTER BEDS

■ **STARWOOD'S WESTIN BRAND** was a pioneer in sleep quality, introducing its "Heavenly Bed" concept in 1999. Now it has a store selling custom-designed mattresses (about £1,750 for king size), pillows and 400-thread count cotton linen (sets from about £900). [westinstore.com](http://westinstore.com)

■ **FOUR SEASONS** recently upgraded its beds with a custom-designed mattress that includes a "Gel Touch" foam centre to absorb heat and regulate body temperature. Like Goldilocks, guests can also choose from a soft, medium or firm mattress topper. The new beds are available in most US hotels, while the international upgrade programme should be completed over the next few years. You can also order one to take home. [fourseasons.com](http://fourseasons.com)

■ **ETIHAD AIRWAYS** collaborated with the American Centre for Psychiatry and Neurology in Abu Dhabi to develop its new sleep programme. It now offers first class passengers all-natural mattresses sourced from the Hevea rubber tree, 100 per cent cotton bedding and down duvets. [etihad.com/comfortzone](http://etihad.com/comfortzone)

### PRESCRIPTION PILLOWS

■ **THERE'S A REASON** behind the trend for hotel pillow menus – sleep specialists believe the wrong pillow height throws the spine out of alignment and can lead to restless sleep. One solution is buying a bespoke pillow online, designed by sleep guru and osteopath Sammy Margo,



by filling out a questionnaire about your sleeping position, body size and personal preferences. £15, [goodsleepexpert.co.uk](http://goodsleepexpert.co.uk)

■ **ALTERNATIVELY**, make the most of the sleep menu on offer at most premium hotel brands. At Dorsett Hotels and Resorts' Grand Labuan in Malaysia, you can choose from a water pillow, a magnetic pillow or one that plays music. [dorsethotels.com](http://dorsethotels.com)

### DIET PLANS

■ **WHAT YOU CONSUME** throughout the day can improve the quality of your sleep, by regulating your blood sugar levels. At London's Corinthia hotel, a sleep menu devised by nutritional therapist Jeannette Hyde includes choices such as a turkey burger with Beenleigh blue cheese and baby spinach, which is rich in tryptophan, used to make the sleep hormone melatonin, and magnesium-rich choices such as warm asparagus with orange hollandaise sauce, roasted sunflower seeds and golden berries, and baby red chard to ease muscle tension. It's available to guests who opt for the two-day "Sleep Retreat", which also includes a spa treatment. [corinthia.com](http://corinthia.com)

### SLEEP COACHING

■ **CROWNE PLAZA** offers guests free podcasts from sleep expert Dr Chris Idzikowski. [crowneplaza.com](http://crowneplaza.com)

■ **AT CHAMPNEYS' UK RESORTS**, Jason Ellis from Northumbria University holds specialist retreats throughout the year to look at your personal barriers to better rest, identifying your ideal bedtime and working out how much sleep you really need. [champneys.com](http://champneys.com)

### POWER-NAP PODS

■ **SINGAPORE CHANGI AIRPORT** has free rest areas for passengers with reclining seats. [changiairport.com](http://changiairport.com)

■ **ABU DHABI INTERNATIONAL AIRPORT'S** Terminal 3 has egg-shaped "Go Sleep" pods that can be rented by the hour for Dhs 30-48 (£5-8). They feature a chair that converts to a flat bed and secure storage for luggage, wifi and power points. [abudhabiairport.ae](http://abudhabiairport.ae), [gosleep.aero](http://gosleep.aero)

■ **DUBAI INTERNATIONAL** Terminal 1 has ten soundproofed "Snoozecubes" bookable by the hour for Dhs 65 (£11). The units include a full-size mattress, TV, wifi and flight updates. [snoozecube.com](http://snoozecube.com)

■ **MOSCOW SHEREMETYEVO'S** 4 sqm "Sleepboxes" house up to three bunk beds, bookable by half-hour periods. [sleepbox.co.uk](http://sleepbox.co.uk)

■ **"NAPCABS" AT MUNICH AIRPORT** and "Sams Snooze at my Space" pods in Terminal 3 of New Delhi's Indira Gandhi International are bookable by the hour, while Yotel cabins in Gatwick South Terminal and Heathrow T4 can be hired for four hours. [napcabs.com](http://napcabs.com), [newdelhiairport.in](http://newdelhiairport.in), [yotel.com](http://yotel.com)

### SLEEP CONCIERGES

■ **AT LONDON'S MONTCALM** hotel, sleep concierges are on hand to help you choose the right pillow to suit your sleeping position, bring you a bedtime drink, or ensure your room is the perfect temperature and level of darkness. [themontcalm.com](http://themontcalm.com)

■ **NEW YORK'S BENJAMIN HOTEL** will set up a white noise machine to drown out background sound, and arrange a sleep-inducing pre-bed spa treatment. [thebenjamin.com](http://thebenjamin.com)

■ **AT THE WESTIN NEW YORK** at Times Square, you can opt for a "rest well call", which will remind you when it's time to go to bed. [westinnymedia.com](http://westinnymedia.com)

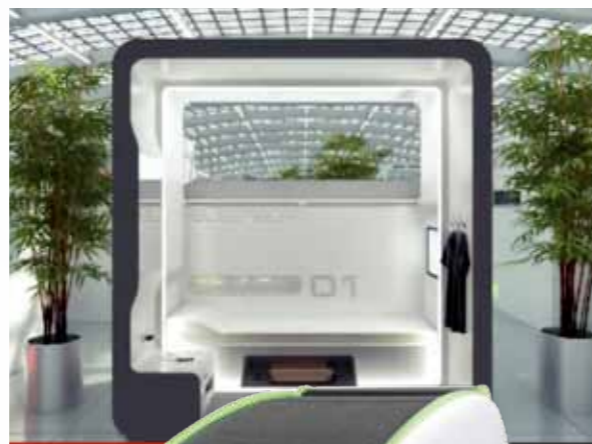
### QUIET FLOORS

■ **MORE AND MORE HOTELS** are creating business-only or quiet floors. Crowne Plaza properties have allocated zones from Sunday

to Thursday with no children or leisure guests allowed. Rooms also include soundproofed walls and headboards, anti-snoring pillows and white noise machines. [crowneplaza.com](http://crowneplaza.com)

### WEIRD SCIENCE

■ **DELTA AIR LINES** recently showcased a "photon shower" prototype created by University of Oxford neuroscientist Russell Foster. The light-filled cubicle is designed to instantly reset your body clock and eliminate jet lag. [fastcocrete.com](http://fastcocrete.com), [delta.com](http://delta.com)



■ **BRITISH AIRWAYS** has trialed a "happiness blanket" that connects to neuro-sensors that measure passengers' brainwaves and changes from red to blue depending on how relaxed they are. The idea is that cabin crew could then alter their routine according to a passenger's mood (see June 30 news story at [businessstraveller.com/tags/british-airways](http://businessstraveller.com/tags/british-airways)). [ba.com](http://ba.com)

# Pillow tech

The latest gadgets and apps can help you to control the length and quality of your sleep, says **Caramel Quin**

## 10 TOP APPS

### SLEEP GENIUS

Free (iOS and Android)  
[sleepgenius.com](http://sleepgenius.com)

As well as tracking your sleep, Sleep Genius uses your smartphone's accelerometer to measure your movement. It will play soothing sounds to lull you to sleep, gently wake you over the course of five minutes, and offer relaxation exercises when you're feeling stressed.

### SLEEP CYCLE

Free (iOS and Android)  
[sleepcycle.com](http://sleepcycle.com)

By tracking your sleep via your phone's accelerometer, you can analyse how you slept in detail, and the alarm can wake you at the optimum point. It also records the percentage of sleep quality and average time in bed.

### DREAM:ON

Free (iOS)  
[dreamonapp.com](http://dreamonapp.com)

An intriguing app that claims to be able to help you choose what you dream about and even support lucid dreaming. It monitors your sleep like other apps, but then plays your chosen soundscape – from "peaceful garden" to "wild west" – when your subconscious is most suggestible.

### SLEEP AS ANDROID

Free (Android)  
[play.google.com](http://play.google.com)

This tells you when it's time for bed, helps you drift off with soft sounds, tracks sleep phases, then wakes you with natural

sounds while you're in a light sleep phase. It also detects snoring and makes clicking sounds to encourage you to stop.

### RELAX MELODIES

Free (iOS and Android)  
[ipnossoft.com](http://ipnossoft.com)

This app lets you combine sounds and melodies to create your own relaxation soundtrack. Experiment to find the mix that's best for you – whether that is thunder or monks chanting, a flute or a cat purring. It sounds quirky, but many insomniacs swear by it.



### SLEEP TIME

Free (iOS and Android)  
[azumio.com](http://azumio.com)

A sleep tracker app with cycle analysis software developed with Stanford University, what makes this app stand out is its sounds. Choose from a range of natural soundscapes to gently lull you to sleep or rouse you when you're snoozing – you choose the 30-minute window in which you'd like to be woken.

### MOTIONX 24/7

£0.69 (iOS)  
[motionx.com](http://motionx.com)

This does all the sleep sensing offered by other apps, but also uses the iPhone camera to measure your pulse optically from your fingertip – finding correlations between your sleep and resting heart rate.

### ENTRAIN

Free (iOS)  
[itunes.apple.com](http://itunes.apple.com)

A clever app from the University of Michigan that calculates how to tackle jet lag before,



as well as after your journey, by using light and darkness to support your body's natural circadian rhythms. Tell it where and when you're travelling and it will create a schedule of light, dark and sleep for you.

### SLEEPBOT

Free (iOS and Android)  
[mysleepbot.com](http://mysleepbot.com)

This tracks data including sleep time, waking time, hours of sleep and your "current debt" – the hours of sleep you're missing out on. Unusually, it records sound, too. There's a graph of noise levels – tap it to hear the audio – proving finally who snores and who talks in their sleep.

### SLEEPRATE

US\$80 (iOS only)  
[sleeprate.com](http://sleeprate.com)

If you're sleeping badly, the problem may be holistic. This pricey app (full kit sold for US\$100) requires a Polar H7 heart rate monitor and uses Stanford University's Cognitive Behavioural Therapy for Insomnia to look at thoughts, routines and emotions by day, alongside sleep logs.