

THE ETERNAL

# QUEST FOR SLEEP

We pop pills, buy fancy pillows and wear weird-looking masks in our attempt to thwart the things that keep us up at night. (Hell, we'll even swallow cold medicine, whether we're stuffed up or not.) So why are we still yawning in the morning? We explore the latest in expert strategies and insights to help you finally get a decent night's rest

PHOTOGRAPHY BY ERIK PUTZ • ILLUSTRATIONS BY CHRISTOPHER PHILPOT



# THREE SIGNS YOU'VE GOT A PROBLEM

Tired, grumpy and highly caffeinated?  
Join the club

BY SYDNEY LONEY

Pythons sleep for 18 hours a day, dolphins sleep for 10, the average house cat sleeps for just over 12 and most of us humans aim for a healthy eight. Sleep is the holy grail of the animal kingdom. We need it to do everything from balancing our hormones to rebuilding our blood vessels—and we lament every hour we lose. “A restless night here and there is normal,” says Dr. Colleen Carney, director of the Sleep and Depression Laboratory at Ryerson University in Toronto. “What’s not normal is if you routinely have trouble falling—or staying—awake.” Three or more restless nights a week? That’s insomnia.

It may help to know that insomnia is one of the most common sleep issues out there, one you share with 3.3 million other Canadians. And, yes, it’s bad for you. Chronic insomnia (six years or more) is linked to diabetes, obesity, heart disease, cancer, dementia and depression, and researchers at the University of Arizona recently concluded, after 40 years of study, that it increases your risk of death by 58 percent.

Fortunately, it’s a sleep problem with a solution. We have a biologically determined—but environmentally sensitive—internal clock that decides when it’s time for sleep, Carney says. “This clock requires a steady, daily input of cues as to what time it is in order to run properly.” Send the wrong cues, you get less shut-eye; send the right ones and hello, sandman. Here are three signs you have insomnia—and what you can do to reset your sleep clock.

**1. Your day begins with the snooze button.** Several things can mess with sleep cues and knock you off schedule, making it harder to get up in the morning. One of the biggest is bright lights before bedtime (Instagram on your iPhone, *True Detective* on TV), which send a message to your body that it’s not night. A recent study in *Proceedings of the National Academy of Sciences* showed ebook readers have a harder time falling asleep than those who read printed books before bed. Another factor is when you set your alarm. If you get up at 7 a.m. during the week but sleep until 10 a.m. on Saturday, Carney says you feel the same jet lag as when you travel across three time zones. “Getting out of bed at the same time seven days a week is the best way to have a healthy sleep clock.”



## WHY DO WE YAWN?

Turns out it’s to prevent mental meltdown. Stress and lack of sleep can affect your brain temperature. Last year, researchers at the University of Vienna discovered you yawn to cool down your brain so you can think more clearly.

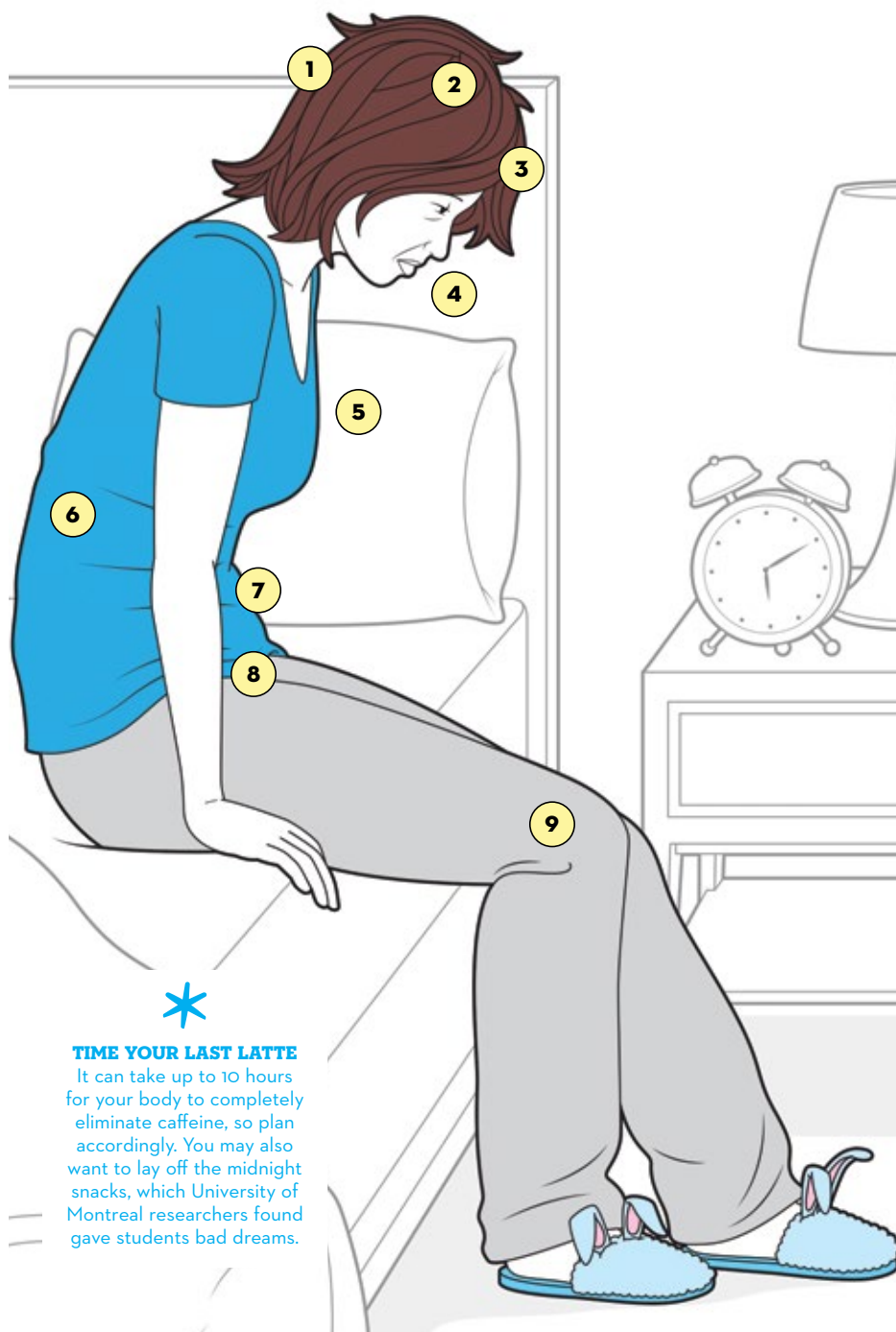
**2. Caffeine cravings kick in around 10 a.m.** To fight feelings of sluggishness, many insomniacs shuffle into the nearest Starbucks line, but caffeine blocks the chemical needed for sleep drive. Sleep drive is also affected by how busy you are. When you’re tired, you’re not as physically active, which makes you less ready for bed when you finally put on your PJs. “You need to build enough drive for sleep by being awake, out of bed and active for 16 to 18 hours,” Carney says. Sneak in extra activity—walks, a trip to the gym, even random jumping jacks—whenever you can.

**3. You’re tired. You lie down. You’re wide awake.** Sounds like you’ve got a case of conditioned arousal. “As people develop a sleeping problem, most respond by trying harder to sleep and increasing the time they spend in bed,” Carney says. “But if your bed is repeatedly paired with wakefulness, just getting into it increases alertness.” Last year, researchers at Johns Hopkins found that insomniacs have more activity in the part of the brain that controls movement, and this heightened information processing may interfere with sleep. The solution is to shut down slowly. “Protect an hour before bed from emails and any goal-directed activities,” Carney says. If your brain continues to buzz, get up until you feel tired again. “If you’re awake all night, don’t worry. As long as you get up at your regular time, you’ll have a greater drive for deep sleep the next night.” Carney also recommends not going to bed with unfinished business. “Process your day in a journal, make lists and try meditation,” she says. A new Harvard study shows just six sessions of mindfulness meditation can help relieve insomnia, general fatigue and depression.

# THE WALKING DEAD

A head-to-toe look at the hits your body takes when you forfeit those precious zzzs

BY KATIE UNDERWOOD



## TIME YOUR LAST LATTE

It can take up to 10 hours for your body to completely eliminate caffeine, so plan accordingly. You may also want to lay off the midnight snacks, which University of Montreal researchers found gave students bad dreams.

1

## EMOTIONAL TRAIN WRECK

People react more emotionally to life stressors when they're tired, say researchers from the University of Arkansas.

2

## BRAIN FUZZ

Yes, decision-making and concentration abilities go kaput when we don't sleep enough, but researchers at the University College London Medical School now say that sleeping too little can also age your brain by seven years.

3

## MEMORY FOG

A 2014 study in *Psychological Science* says just one night of disturbed sleep can cause major distortions in memory.

4

## SAD FACE

According to new research in *Sleep*, common giveaways of a restless night include droopy, swollen red eyes; pale, wrinkly skin; and an aura of sadness.

5

## IMMUNITY BREAKDOWN

Researchers at the University of Helsinki say insufficient sleep ramps up your body's inflammatory response and compromises your immune system.

6

## CELL DAMAGE

Up late last night? Think of your cells! Scientists at the Medical College of Wisconsin have linked sleep loss with cell damage, particularly in the liver, lungs and small intestine.

7

## WEIGHT GAIN

Forget potato chips – that snug waistband may be due to sleep deprivation. A recent study in the *American Journal of Human Biology* says lack of sleep inhibits the hormones that regulate our appetites and increases our risk of obesity.

8

## LAGGING LIBIDO

Research in the *Journal of Sexual Medicine* shows women with sleep apnea (when your breathing repeatedly stops and starts) have higher rates of sexual dysfunction. Meanwhile, a recent study by researchers in the U.S. shows women who sleep an extra hour are 14 percent more likely to have sex the next day.

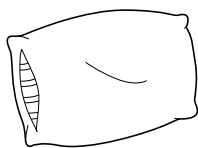
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## MORE PAIN, LESS GAIN

Poor sleepers have a heightened sensitivity to pain, says a recent study in the journal *Pain*. Ouch!

## A QUICK HISTORY OF SLEEP AIDS

**7000 BC** The first **pillows**, made of stone, are used in Mesopotamia to relieve back pain. **AROUND 8 BC** Opium is introduced as a sleep aid in ancient Greece. (Hypnos, the Greek god of sleep, is often depicted holding poppy flowers.) **1600s** Valerian root is used to ease insomnia. Recent studies show it may help you fall asleep, but it can cause headaches and stomach upset. **1880s** Barbiturates, which induce sleep by inhibiting neuron activity in the brain, make their debut. **1958** Melatonin, the hormone that regulates sleep cycles, is discovered. Studies show supplements may relieve insomnia. **1970** Dalmene, a type of benzodiazepine, becomes a top-selling sleeping pill. Studies show benzodiazepines may reduce restorative REM sleep. **2013** The FDA lowers the recommended dose of Ambien due to side effects like sleep-eating. **2014** The FDA approves Belsomra, the first pill to block orexin, a chemical that controls the sleep cycle and keeps people awake at night.



IN PRAISE OF **SLEEPING ALONE**

BY KATE RAE

My previous marriage involved separate bedrooms, which I quite liked. My current marriage involves one. Sometimes he and I sleep beautifully, but mostly not. Sometimes he sleeps on his back with his hands by his ears, like he's doing crunches. He's not a snorer, thank God, but many nights he wakes me with loud sleep laughs.

My current marriage also involves children, who appear at the foot of our bed like apparitions from a horror movie I have no desire to see. Sometimes the dog barks from her bed on the floor and I need to invite her up. Inevitably, she positions herself with her rear end on the pillow. Frequently, she is flatulent.

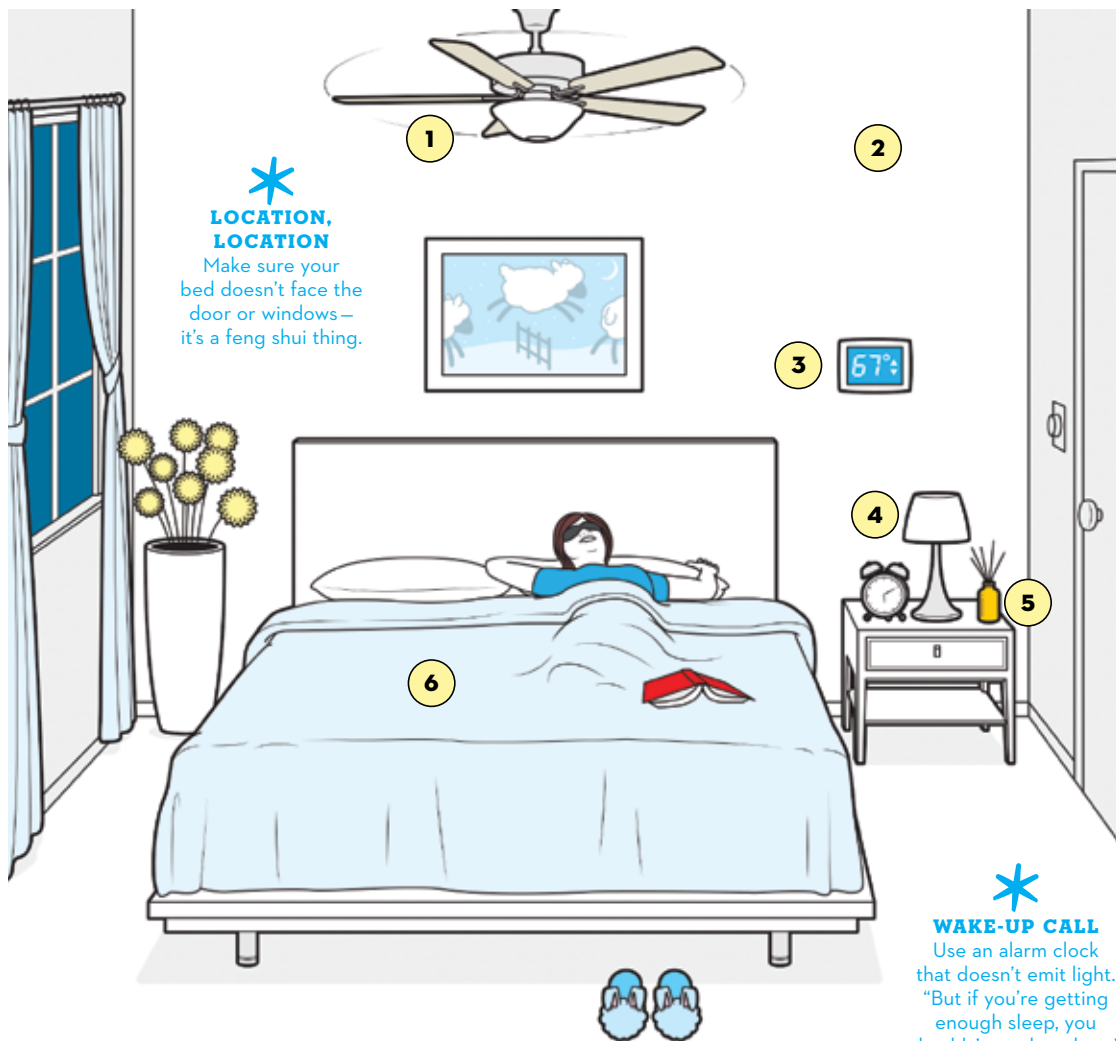
I am very often very tired. All I want is to sleep alone, or at least to sleep as well as I would if I were alone. I don't want to hear or feel or smell or be kicked by anyone. I don't want a man's elbow in my ear, a rough dog-paw pad on my cheek or a child's toenail scratching my foot.

Last night, my husband and I had a fight. One of those dumb fights after a perfectly lovely day that are so stupid, everyone understands that the best thing to do is separate and go the eff to sleep. He grabbed his pillows and headed to the couch. I eyed the bed—a luscious queen with crisp, white, clean sheets—and slid inside, starfishing at first, scissor-kicking on my side next. I sighed deeply and was asleep in minutes.

# BUILD A BETTER BEDROOM

How to transform your space into a sanctuary for sleep

BY DOMINIQUE LAMBERTON



**\* LOCATION, LOCATION**  
Make sure your bed doesn't face the door or windows—it's a feng shui thing.

**\* WAKE-UP CALL**  
Use an alarm clock that doesn't emit light. "But if you're getting enough sleep, you shouldn't need an alarm," says Dr. Michael Breus.

1

**SOUND**

Drown out bustling street noise (or a snoring partner) with pink noise—sound (like falling rain) with a lower, steadier frequency than white noise. A fan works well, or try an app like Rain, Rain Sleep Sounds that you can set on a timer.

2

**PAINT**

Muted, neutral colours are best for relaxation as opposed to bright colours, like red, which are attached to emotion. But it's actually the type of paint that matters most. Choose a matte finish instead of high gloss, which reflects light.

3

**TEMPERATURE**

"People sleep better when it's cool," says Dr. Michael Breus, a clinical psychologist in Scottsdale, Arizona. The ideal room temp is between 18C and 21C.

4

**LIGHT**

"Melatonin is called the vampire hormone because it comes out only in darkness," Breus says. "It's the key that starts the engine for sleep, so it's best to avoid bright lights after about 8 p.m."

5

**SCENT**

Research shows that lavender, ylang-ylang and vanilla can all help you feel more relaxed—and you need to be relaxed before you can sleep, says Breus. Avoid candles (fire hazard!) and opt for a reed diffuser or pillow spray instead.

6

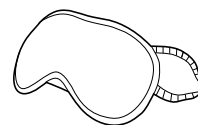
**BEDDING**

Cotton sheets are the most breathable, and synthetic down duvets are allergen-free. "If you're a back or stomach sleeper, buy a thin pillow," says Breus. If you're a side sleeper (best for uninterrupted sleep), a thicker pillow keeps your head and spine aligned.



# SWEET DREAMS ARE MADE OF THESE?

We sent our features director (and resident insomniac) Danielle Groen\* off to bed with three pairs of PJs to see which produced the most satisfying slumber



HOW TO  
**HAVE  
BETTER  
DREAMS**

BY ALEXANDRA KIMBALL

We've long known dreams and creativity are connected: Both Mary Shelley's *Frankenstein* and Salvador Dali's melting clocks were inspired by dreams. Thanks to brain-imaging technology, we now know why. "During REM sleep, the part of the brain responsible for logic and reason, the frontal lobe, doesn't fully regulate the amygdala, the part of the brain that governs emotion, the way it does in waking life," says Dr. Joseph De Koninck, director of the Sleep Laboratory at the University of Ottawa. "Images and thoughts become linked in new and vivid ways." Here's what else:

» **Dreams help you learn:**

De Koninck's research shows that language mastery is enhanced after REM sleep, and dreams reflect that. "As people learn more, they start to dream in the new language," he says.

» **Nightmares are extreme versions of regular dreams:** "In nightmares, the amygdala, which produces feelings of fear, and the frontal lobe are less connected than during pleasant dreams," says De Koninck.

» **You can improve dreams:** "Write down a nightmare, then rewrite a new scenario," De Koninck says. "People who want more pleasant, or even lucid, dreams can also try 'pre-dream suggestion' by meditating on what they want to dream about before falling asleep."



*sleep stealer*

[SET 1]

## Polyester Nightshirt

**Expert take:** Polyester isn't great if you run hot at night, says Sheila Connell, owner of Shades of Sleep in Calgary. And it's a common misconception that bamboo is any better. "The process to make bamboo into a fibre is a long and not environmentally friendly one—and it's basically just rayon in the end."

**DANIELLE SAYS:**

*"The fabric barely breathed and the shirt kept bunching up around my waist. I finally just tore the damn thing off."*



[SET 2]

## Cotton Two-Piece

**Expert take:** "Full-length PJs are restrictive. A thin-strapped nightgown that stops at your knees is better for sleepers who tend to move around at night."

**DANIELLE SAYS:**

"These PJs are adorable, so I was highly invested in them working out. They did, sorta: The cotton's comfy, but I kept fussing with the mid-length sleeves."

*short but sweet*

[SET 3]

## Modal Short Set

**Expert take:** "Even though cotton is a great natural fibre to sleep in, Modal, a relatively new fibre made from beech trees, is extremely soft and 50 percent more breathable."

**DANIELLE SAYS:**

"I was skeptical about the shortie-shorts, but the whole outfit is made of some light, cool magic that actually let me forget I don't have AC. The best sleep of all."

**FALL  
ASLEEP**  
IN 10 MINUTES  
(OR LESS)

**LET GO** Check in on your emotional state from the day, then consciously let go so the feelings simply dissolve. **BREATHE** Take a few deep breaths and relax your shoulders, stomach muscles, face, hands and legs. Release any tension in your body. **VISUALIZE** Imagine your body is made up of light. Visualize that you can see every cell, from your head to your feet, filled with light, warmth and peace. **EASE INTO SLUMBER** Open yourself to the feeling of relaxation, warmth and peace; let your awareness dissolve like water merging with water. Stay with the visualization as you ease into slumber. *Courtesy of Loren Witcher, program manager of Tools for Peace*