

BRAVA

women + style + substance

Oh,

**FOR A GOOD
NIGHT'S SLEEP!**

> FEEL LESS TIRED
*Tips, tricks + ideas for
sweeter dreams*

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VALENTINE'S DAY**
*Great gifts, delish eats,
luxe lodgings + more*

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DOWNTOWN**
*OUT FRONT AND BEHIND THE SCENES,
THEY MAKE THE CITY TICK.*



SLEEP, PRECIOUS SLEEP

WHY ARE WE SO TIRED—
AND WHAT CAN WE DO ABOUT IT?

BY EMILY LEAS | PHOTOGRAPHED BY SHANNA WOLF

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WHEN VALERIE GONSALVES OF MADISON WAS IN GRADUATE SCHOOL, SLEEP WAS OPTIONAL. JUST A FEW HOURS A NIGHT BECAME ROUTINE. SHE ADAPTED.

"I KNEW IT WASN'T THE HEALTHIEST PATTERN," SHE ADMITS. "BUT IT WORKED."

Gonsalves' approach is one that many of us have adopted in our world of always-on technology and increasingly demanding work schedules. According to Stephanie Jones, Ph.D., associate scientist and assistant director at Wisconsin Institute for Sleep and Consciousness at UW-Madison, the average American adult has reduced sleep by an hour-and-a-half per night since the 1970s. And according to the Centers for Disease Control and Prevention, an estimated 50 to 70 million U.S. adults have sleep or wakefulness disorders. "People are horrible reporters of their own sleepiness," says Jones. "We will psychologically adapt to sleep loss and think, 'I feel OK, my reaction time is good, I'm thinking as well as I should be.'"

But it's not true, she warns. When you get used to feeling tired throughout the day, you're no longer aware of how significant the sleep loss is and how impairing on the mind and body it can be. So why is sleep so important, and should we worry if we don't get "enough" sleep?

Jones admits that the function and reason all organisms sleep is still a bit of a mystery, but the fact is all organisms do sleep, from animals to insects to humans, and evolution has not dispensed with it.

"I think most scientists would agree, sleep is for the brain," says Jones. "The body can probably do with just rest, but the brain cannot."

She explains a theory that regular sleep, especially non-REM sleep when brain waves are slow and synchronized, allows our brain to downscale the synapses that have been working hard all day to learn and store memories. These synapses use up a lot of resources like glucose.

"It's like a reset button," she says of this deep sleep process. It prepares us for the next day to gather more information and feel alert and ready for the day.

Dr. Jacalyn Nelson, medical director of SSM St. Mary's Sleep Medicine Department,

SLEEP AIDS

SEEING ALL THOSE ADS ON TV AND THINKING YOU'D LIKE A SCRIPT OR SOME OVER-THE-COUNTER HELP TO SLEEP?

OUR EXPERTS SAY YOU MAY WANT TO THINK TWICE ABOUT THESE SEEMINGLY MAGIC PILLS.

"OFTEN TIMES WHEN PEOPLE START TO USE MEDICATION, THEY ARE ACTUALLY COVERING UP SYMPTOMS THAT REALLY NEED TO BE EVALUATED, SO IT'S IMPORTANT TALK TO YOUR DOCTOR ABOUT ALL ASPECTS OF YOUR SLEEP ISSUES BEFORE REACHING FOR THAT OVER-THE-COUNTER MEDICATION," SAYS DR. JACALYN NELSON, MEDICAL DIRECTOR FOR SLEEP MEDICINE AT SSM ST. MARY'S.

STEPHANIE JONES AT THE WISCONSIN CENTER FOR SLEEP AND CONSCIOUSNESS AGREES. "PEOPLE OFTEN REACH FOR SLEEP MEDICATIONS BECAUSE IT'S EASY, BUT THEY ARE SO QUICKLY HABIT FORMING, AND MOST PEOPLE DEVELOP A TOLERANCE QUICKLY. THERE IS VERY LITTLE RESEARCH INTO WHETHER THE SLEEP YOU'RE GETTING IS THE SAME QUALITY AS PHYSIOLOGICAL SLEEP. SO YES, YOU GO TO SLEEP, BUT IS YOUR BRAIN DOING THE THINGS IT'S SUPPOSED TO DO? PROBABLY NOT, OR NOT AS WELL."

says that sleep is also an active time for hormone release and balancing. And one of the most noticeable effects of not getting enough sleep is an imbalance of ghrelin, a hormone that makes us feel hungry, and leptin, a hormone that helps us feel full, or satiated.

"The ratio gets upset and reversed, and causes ghrelin to increase—making us feel hungry—especially for the things we shouldn't eat like carbs and junk food," Nelson says. This leads not only to weight gain, but also tiredness throughout the day.

Insulin resistance, glucose intolerance, diabetes, high blood pressure and high cholesterol are just a few of the other physiological risks of not getting regular deep sleep. Add in the emotional and mental impacts, such as decreased performance on the job, irritability, anxiety, and drowsiness when driving, and the value of sleep becomes clear.

"Sleep is actually a very active time. We like to think of sleep in our culture as being a waste of time, but that's absolutely not true," says Nelson.

Sometimes though, sleep just doesn't come, or tiredness plagues us throughout the day. One of the most commonly reported reasons among women is insomnia.

Jones explains that insomnia is difficult to treat because it can be caused by an array of issues from psychiatric disorders such as anxiety or bipolar, to menstrual cycles, to aging. But a good place to start if you think you have insomnia is evaluating your sleep hygiene. Are you drinking alcohol or caffeine before bed? Are you on your phone or tablet within an hour of going to bed? If the answer is yes, it may be keeping you up at night.

Menstrual cycles can also wreak havoc on our sleep, says Jones. "Estrogen is the energy hormone, and progesterone is the sleepy hormone," she explains. "So women will report insomnia in the few days before their menstrual period because progesterone plummets causing a disruption in sleep patterns."

Both experts agree that improving sleep hygiene, meditation, breathing techniques and relaxation exercises can typically improve mild insomnia, but Cognitive Behavior Therapy is the front line of treatment for more severe cases.

Nelson explains that Cognitive Behavior Therapy for insomnia involves a series of visits with a clinical psychologist to review sleep patterns and evaluate for mental health issues like depression and anxiety.

"[The psychologist] also reviews the person's beliefs and thoughts about sleep, which may not be serving them well, then puts into place a strategy to change that behavior," she explains.

As Gonsalves began her post-doctorate work, she realized that her grad school sleep habits weren't working anymore, but she couldn't get her brain to stay asleep all night. Her doctor recommended a sleep study through the Wisconsin Sleep Center at UW Health, where Gonsalves was evaluated overnight for irregular sleep patterns. Nothing conclusive came out of the study, so Gonsalves decided to make sleep a bigger priority in her life.



CREATE A SLEEP HAVEN

Start improving your sleep by developing good sleep hygiene with these five tips:

SET A TECHNOLOGY CURFEW. The blue light from phones, tablets, TVs and laptops stimulate our senses and create an imbalance in sleep/wake patterns.

MEDITATE. "Relaxation techniques, and especially meditation can alleviate insomnia," says Jones of UW Madison's sleep center. "Sometimes people grind and worry about sleep...how much or how little they're getting. Generally decreasing anxiety can lead to better sleep."

GO TO BED AND WAKE UP ON A REGULAR SCHEDULE, even on the weekend.

AVOID AFTERNOON AND EVENING CAFFEINE.

AVOID ALCOHOL BEFORE BED. Although you may fall asleep easier, the sedative effects typically wear off causing lighter or fragmented sleep.



he lists off the improvements to her sleep hygiene over the last few years, "My room is completely dark. I don't have a television in my room, which I did before. I don't drink any caffeine after 2 or 3 in the afternoon. I also keep a pretty regular sleep/wake schedule."

But is it working? She says she still wakes up in the middle of the night, but now she doesn't have a clock next to her bed, which used to make her anxious about how many more hours of sleep she has left. Regular exercise and avoiding carbohydrates at lunch are also tactics she focuses on when her sleep patterns are out of whack.

Often, women who complain of insomnia may also suffer from restless leg syndrome, which is an irresistible urge to move the limbs, especially the legs, and especially at night. Jones notes that the syndrome is commonly linked to low iron levels, yet another side effect of menstruation.

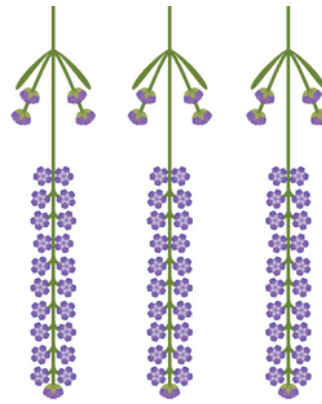
Fragmented sleep can be caused by other physical disorders as well, like obstructive sleep apnea, which occurs when the airway collapses or is obstructed during sleep. This restricts or stops breathing, preventing that delicious slow wave, non-REM sleep our brains crave.

Jones explains that although sleep apnea is often related to obesity—and men are twice as likely to have it as women—the rate of the disorder increases as women approach menopause, a time when sleep becomes more disrupted in general.

"It could be related to weight gain during menopause, or a decrease in estrogen," says Jones. "Estrogen keeps our tissues rigid, so the decrease in hormones may just make our airways floppier, leading to sleep apnea."

Typically, sleep apnea is diagnosed through a split-night sleep study in labs like those at UW Health and SSM St. Mary's. Patients are evaluated through the first part of the night, and if diagnosed, a sleep technician fits them with a CPAP, a device that fits over the nose and blows the airway open during sleep. In milder cases, positional changes, like avoiding sleeping on the back, or an oral device fitted by a dentist can alleviate obstructive sleep apnea.

Jones is quick to note that the function and biology of sleep is still a bit of a mystery, but what is known is that sleep can vary naturally, due to genetics, age and brain chemistry. And the more we adapt to less sleep, the higher the risk of impacting our health. Listen to your body and treat it to regular sleep patterns in a quiet, nonelectrified space. And don't be afraid to dig a little deeper into the reasons why sleep may be eluding you. Your brain and your body will thank you. 🌟



NATURAL SLEEP REMEDIES

IF YOU'VE IDENTIFIED THE SOURCE OF YOUR SLEEPLESSNESS, WHETHER IT'S MENTAL, EMOTIONAL OR PHYSICAL, ANNA BECK, OWNER OF PLANT BASED GOODS IN MADISON, SUGGESTS LOOKING TO NATURE FOR ALLIES IN ACHIEVING DEEP SLEEP. HERE ARE A FEW OF BECK'S SUGGESTIONS:

TO CALM AND RELAX:

SQUEEZE A SACHET OF LAVENDER BY YOUR PILLOW NIGHTLY.

SPRITZ YOUR PILLOW AND SHEETS WITH AN AROMATHERAPY SPRAY THAT CONTAINS CALMING PLANTS LIKE LAVENDER, CHAMOMILE AND LEMON BALM.

BRING FLOWERS INTO YOUR SPACE, LIKE ROSE AND YLANG-YLANG.

APPLY GROUNDING OILS LIKE VETIVER AND FRANKINCENSE TO PRESSURE POINTS.

TO EASE AILMENTS:

VALERIAN ROOT IS ONE POWERFUL MUSCLE RELAXANT. BECK SUGGESTS TRYING IT IN TEA OR TINCTURE FORM.

SIPPING AN HERBAL TEA LIKE PEPPERMINT OR A BITTER BLEND AFTER DINNER CAN AID IN DIGESTION IF FOOD IS BITING BACK BEFORE BEDTIME.

TO IMPROVE SLEEP:

TRY A HALF TEASPOON OF HONEY WITH A SPRINKLE OF SALT TO HELP SLEEP HORMONE PRODUCTION. WELLNESSMAMA.COM.

SSM ST. MARY'S NELSON ALSO SUGGESTS DRINKING AN OUNCE OF TART CHERRY JUICE BEFORE HITTING THE PILLOW. THE JUICE CAN HELP INCREASE MELATONIN PRODUCTION, THE HORMONE THAT KEEPS OUR SLEEP RHYTHMS IN CHECK.

HOW SLEEP CHANGES

"It's completely developmentally normal for your sleep quality to decline with age," says UW Madison's Jones. Here's how she explains the brain changes that affect our sleep:

KIDS AND TEENS

The brain develops from back to front, and insufficient sleep (kids need about 9 to 10 hours per night) hinders that development and nerve refinement.

ADULTS

Men have a precipitous drop in slow wave sleep, the really important deep sleep, after 45 or 50. But women preserve slow wave activity much longer.* So while 7 to 8 hours is recommended per night, the actual sleep that is needed by women and men will vary throughout adulthood.

SENIORS

In the brain, what goes up, must come down. It builds and develops from back to front, and it tears down from front to back. So as the cortex thins at the front of the brain, those great big slow waves just aren't needed and the circadian rhythm changes. "We have 85-year-old men coming into the clinic worried that they're not getting 8 hours of sleep, but they may not need 8 hours of sleep," says Jones.

*MENOPAUSE

According to the National Sleep Foundation, as many as 61 percent of menopausal and post-menopausal women report insomnia symptoms, which are typically caused by hot flashes. And while total sleep time may not suffer, sleep quality does because sleep is interrupted, which causes next-day fatigue.

Since hot flashes are caused by the drop in estrogen that comes with menopause, both of our experts note that hormone replacement therapy is commonly prescribed, but research into the effectiveness and safety is mixed.

"You can always discuss hormone replacement therapy with your primary care [doctor] or gynecologist if sleep is being severely disrupted by perimenopause or menopause," says SSM St Mary's Nelson. "And honestly, what I find in a lot of research and recommend to my patients is to just use a fan at night."

PRODUCT INFORMATION:

Shot on location at The Company Store in Madison.

Read "About the Model" to meet Elle Duncombe-Mills at BRAVAmagazine.com.

Products on P. 43: Deco Delight chemise by Freya, \$69; La Lingerie. On cover and P. 45: Starlight shorty pajama set by Only Hearts, \$132; La Lingerie.

All bedding from The Company Store.



THE SLEEP LAB

An exam room doesn't sound like the most conducive space for sleep, but sometimes an office visit isn't enough to diagnose sleep issues like sleep apnea, narcolepsy, restless leg syndrome, and periodic limb movement syndrome. Jones shares the basics of a sleep study at UW Health.

YOU'LL BE ASKED TO ARRIVE ABOUT TWO HOURS BEFORE BEDTIME. Bring your pajamas!

YOU'LL SLEEP IN A COMFORTABLE, DARK, PRIVATE ROOM.

A SLEEP TECHNICIAN SETS YOU UP FOR THE STUDY with electrodes on your head, an oximeter, a respiratory belt to monitor breathing effort and a nasal cannula to check breathing stoppage.

THE TECHNICIAN AND DOCTOR WILL OBSERVE YOU through a window and monitor brain waves, eye movements, snoring and breathing patterns.

THE TECHNICIAN MAY COME IN to adjust electrodes throughout the night. Jones says that although a full night of sleep is not needed for the study, often those with insomnia "sleep awesome" in the lab without the anxieties of home present.

WHEN EVALUATING FOR OBSTRUCTIVE SLEEP APNEA, (the "bread and butter" of most sleep labs) a split-night study is performed. If you do have apnea, you would be diagnosed in the first half of the night, and then the tech would set you up with a CPAP machine to determine what kind of pressures you're going to need at home to keep that airway open.

IF YOU'RE OTHERWISE HEALTHY AND JUST HAVING TROUBLE SLEEPING, the sleep lab may set you up with an at-home sleep test. Advantages are that you sleep in your own bed and just wear the respiratory belt—no electrodes on the head. After sleeping with the belt, you would visit the lab to review the results with your doctor.