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MECCA

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Catch your ZZZZZZZZZs

A good night's sleep isn't just about hitting the ground running or staying alert in your 8 A.M. meeting. If you skip the restorative 7 to 9 hours experts advise, you can increase your risks of a host of ills—from catching the flu to developing heart disease and diabetes.

** Too-little sleep may throw off hormones that regulate appetite, increasing a taste for high-fat, high-carbohydrate foods and causing you to want more calories than your body needs. After going without enough sleep for 2 nights, people in one study had more of the hunger-inducing hormone ghrelin and less of the appetite-suppressing hormone leptin. Over time, this can lead to weight gain. In studies of identical twins, University of Washington researchers found that those who logged 7 to 9 hours a night had an average BMI of 24.8—almost 2 points lower than the average BMI of those who slept less.

** People who get less than 7 hours per night are 3 times likelier to catch a cold, according to a *JAMA* study. Other research found that sleep-deprived men failed to mount the normal immune response after receiving flu shots. They had only half as many disease-fighting antibodies 10 days after the vaccination, compared with men who were well rested. That's because sleep boosts immunity; too little impairs it.

** After just 6 days of sleep restriction, people develop resistance to insulin, the hormone that helps transport glucose from the bloodstream into the cells, say University of Chicago researchers. In another study, tests showed that participants who slept fewer than 6 hours a night and claimed to be "natural short sleepers" couldn't metabolize sugar properly. This could lead to type 2 diabetes, a serious, on-the-rise chronic condition.

** The University of Chicago study also found that inadequate shut-eye caused levels of cortisol, the stress hormone, to spike in the afternoon and evening—increasing heart rate, blood pressure, and blood glucose and raising your risk of hypertension, heart disease, and type 2 diabetes. Aside from posing future health problems, the cortisol-induced alertness comes at an inopportune time—when you should be winding down your day or sleeping.

** After a restless night, your reaction time decreases, making driving (among other activities) dangerous. Chronically tired people are also less happy. "Sleep and mood are regulated by the same brain chemicals," says Joyce Walsleben, PhD. This can raise the risk of developing depression, but probably only for those already susceptible to the illness.

** As anyone who's pulled an all-nighter can attest, the consequences—pasty skin and dark circles—aren't pretty. "Even worse, increased cortisol levels may slow collagen production, promoting wrinkles," says Jyotsna Sahni, MD, a sleep medicine doctor at Canyon Ranch in Tucson. On the flip side, there's a good reason they call it beauty sleep. "Hormonal changes boost blood flow to the skin, brightening it overnight," says Melvin Elson, MD, a clinical professor of dermatology at Vanderbilt School of Nursing. Skin temps are higher, too, so age-fighting potions seep deeper for better results. And even though you're resting, your skin is hard at work. Studies show that cell turnover is 8 times faster at night, softening wrinkles.

** It's no surprise that chronic pain (like that from back problems or arthritis) can make you toss and turn. But getting too little rest can cause or intensify pain, creating a vicious cycle. In one study from the Johns Hopkins Behavioral Sleep Medicine Program, director Michael Smith, PhD, awakened healthy young adults for 20 minutes every hour during an 8-hour period for 3 days in a row. The result: They had a lower pain tolerance and suddenly developed more pain during a lab test that exposed them to a cold stimulus.

** Exercise helps prevent cancer, but getting too little shut-eye may cancel out its protective effect, concludes a new Johns Hopkins Bloomberg School of Public Health study. Researchers tracked nearly 6,000 women for about a decade and found that workout buffs who slept 7 or fewer hours per night had a 50% greater chance of developing cancer than exercisers who got more Zzzs—similar to the risk of nonexercisers. Insufficient sleep may cause hormonal and metabolic disturbances linked to cancer risk, erasing the benefits of exercise.

Want to hit the hay earlier?

1. Gradually advance your bedtime by 15 minutes a night.
2. Dim the lights in your home about an hour before bed, and start a routine that tells your body it's time to snooze (put on pj's, brush teeth, wash face, listen to relaxing music).
3. Avoid the TV and computer.
4. Meditate or do light stretching. Research has found that people who relax in the evening fall asleep about 30 minutes sooner and get an extra hour of sleep.

HELPS FOR SLEEP STEALERS

** When fretful, get up and go to another part of the house (but leave the lights off). "Your anxious thoughts will usually stop right away. Then you can go back to bed and fall asleep," Carney says. This well-studied strategy, called stimulus control, also prevents you from associating your bed with anxiety. Another tip: Set aside time early in the evening to problem solve. Write down your pressing concerns, along with a possible solution for each, a few hours before retiring.

** Even if you've been up late, don't sleep in more than an hour longer than usual on weekends. To make up for lost slumber, take an afternoon catnap (no more than 30 minutes, though, because an extended daytime snooze can keep you awake at night).

** Get your snoring spouse treated for sleep apnea.

** A hot bath a couple hours before turning in.

** Grab a basket, toss in any unfinished work--bills, spreadsheets, that half-done scrapbook--and promptly remove it. "When you eliminate the stuff in your bedroom that isn't related to sleep, your brain starts to associate the room only with sleep and intimacy," says Lawrence Epstein, MD, medical director of Sleep Health Centers in Boston and coauthor of *The Harvard Medical School Guide to a Good Night's Sleep*. Also keep your computer in another room, or at least place it in a cabinet that can be closed. You'll be shutting the door on stress and late-night screen gazing, which has been proven to hinder sleep, according to a Japanese study in the *Journal of Applied Physiology*. The monitor's bright display may inhibit your production of melatonin, the hormone responsible for telling the body it's time for bed.

** If there is light in the hallway, shut the bedroom door. Also, turn your alarm clock toward the wall (or opt for the nondigital variety), and eliminate night-lights. To block outside brightness, hang blackout shades and curtains.

** Surprisingly, it's not sound or lack thereof that's keeping you awake, "it's the inconsistency of sound or silence that's disruptive," says Thomas Roth, PhD, director of the Sleep Disorders and Research Center at Henry Ford Hospital in Detroit. Turn on a nearby ceiling or exhaust fan. "This will act as white noise, both blocking out disruptive sounds and providing just enough noise for those who can't stand total silence," Roth says. A white-noise machine will do the trick, too.

