

Here's A Horrifying Picture Of What Sleep Loss Will Do To You

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If you *don't* snooze, you lose. Skimping on sleep can wreak havoc from head to toe. In fact, [one study published last year](#) showed that just one week of sleeping fewer than six hours a night resulted in changes to more than 700 genes. That's alarming news, considering nearly half of Americans don't bank the recommended seven or more hours of shut-eye a night, [according to a recent survey](#). Read on for the nightmare-inducing truth about what could be happening to your body when you don't get enough sleep, starting the very first night.

Lose Sleep, Lose Your Mind And Health

Early studies have linked lack of sleep to both colorectal and aggressive breast cancers.

Multiple studies have suggested a relationship between chronic sleep deprivation and increased obesity risk.

Research has linked short-term sleep deprivation with a propensity to load up on bigger portions, a preference for high-calorie, high-carb foods and a greater likelihood of choosing unhealthy foods while grocery shopping.



Risk of some cancers may increase

Obesity risk jumps

Stroke risk quadruples

Hungrier and apt to eat more

More likely to have an accident

Not looking your best – or your most approachable

Diabetes risk goes up

AFTER A WHILE YOUR...

AFTER ONE NIGHT YOU'RE...

More likely to catch a cold

Heart disease risk increases

Losing brain tissue

Sperm count decreases

Risk of death goes up

Less focused and having memory problems

More likely to get emotional

Infographic by Alissa Scheller for The Huffington Post

After one night you're...

hungrier and apt to eat more. Studies have linked short-term sleep deprivation with [a propensity to load up on bigger portions, a preference for high-calorie, high-carb foods](#) and a greater likelihood of [choosing unhealthy foods](#) while grocery shopping.

more likely to have an accident. Getting six or fewer hours of shut-eye a night triples your risk of drowsy driving-related accidents, [according to the National Sleep Foundation's Drowsydriving.org](#). Plus, just one bad night's sleep can affect a driver's eye-steering coordination, [according to research from Manchester Metropolitan University](#). And sleep deprivation can just make you generally more clumsy, whether you're behind the wheel or not, [reports Prevention](#).

not looking your best -- or your most approachable. Beauty sleep is legit. A small study published last year in the journal SLEEP found that sleep deprived study participants were rated as less attractive and sadder, [HuffPost reported at the time](#). A different study from the Medical Institutet Karolinska in Stockholm, Sweden found that exhausted people are also judged to be less approachable. And the problem only gets worse over time: Researchers have linked chronic sleep deprivation with [skin aging](#).

more likely to catch a cold. Proper rest is one of the building blocks of a healthy immune system. In fact, [one Carnegie Mellon University](#) study found that sleeping fewer than seven hours a night was associated with a

tripled risk of coming down with a cold. What's more, [the Mayo Clinic explains:](#)

During sleep, your immune system releases proteins called cytokines, some of which help promote sleep. Certain cytokines need to increase when you have an infection or inflammation, or when you're under stress. Sleep deprivation may decrease production of these protective cytokines. In addition, infection-fighting antibodies and cells are reduced during periods when you don't get enough sleep.

losing brain tissue. A small, recent study of 15 men, published in the journal SLEEP, found that [just one night of sleep deprivation](#) was linked with signs of brain tissue loss, measured by blood levels of two brain molecules that usually increase after brain damage.

more likely to get emotional. [One 2007 study](#) from researchers at the University of California, Berkeley and Harvard Medical School used functioning Magnetic Resonance Imaging to show that after sleep deprivation, the brain's emotional centers were more more than 60 percent more reactive. "It's almost as though, without sleep, the brain had reverted back to more primitive patterns of activity, in that it was unable to put emotional experiences into context and produce controlled, appropriate responses," senior author Matthew Walker, director of UC Berkeley's Sleep and Neuroimaging Laboratory, said in a statement. "Emotionally, you're not

on a level playing field."

less focused and having memory problems. Being exhausted [zaps your focus](#), and can render you [more forgetful](#) (no wonder you keep misplacing your cell phone after a bad night between the sheets). On top of that, sleep is thought to be involved in [the process of memory consolidation](#), according to Harvard, which means shortchanging it can make it more difficult to learn and retain new things.

After a while your...

stroke risk quadruples. Research presented at the SLEEP 2012 conference suggested that getting fewer than six hours a night can ratchet up stroke risk for middle- and older-aged people. "These people sleeping less than six hours had a four times increased risk of experiencing these stroke symptoms compared to their normal weight counterparts that were getting seven to eight hours," study researcher Megan Rutter, of the University of Alabama at Birmingham, [told HuffPost at the time](#).

obesity risk jumps. Not only can short-term sleep loss lead to increased caloric consumption, but multiple studies have suggested a link between chronic sleep deprivation and increased obesity risk over time. [One 2012 research review](#) from Penn State, for instance, found that sleeping fewer than six hours a night was linked with changes in levels of the appetite hormones ghrelin and leptin. [Another 2012 study](#) published in the American Journal of Human Biology showed that too little sleep was tied to changes in appetite regulation, which could trigger people to eat more. [And yet another](#)

study from the University of Pennsylvania found that study participants who were sleep deprived for five nights in a row gained about two pounds, perhaps because of late night snacking.

risk of some cancers may increase. One Cancer study of 1,240 participants who underwent colonoscopies found that those who slept fewer than six hours a night had a 50 percent spike in risk of colorectal adenomas, which can turn malignant over time. Another 2012 study identified a possible link between sleep and aggressive breast cancers. Researchers have also suggested a correlation between sleep apnea and increased cancer risk of any kind.

diabetes risk goes up. A 2013 study from the Centers for Disease Control and Prevention found that too little (and too much!) sleep was linked with a host of chronic diseases, including Type 2 diabetes. And the same 2012 study that found that sleep deprivation was linked to hormonal changes associated with obesity also found that too little sleep was tied to decreased insulin sensitivity, a diabetes risk factor.

heart disease risk increases. Chronic sleep deprivation has been associated with high blood pressure, atherosclerosis (or cholesterol-clogged arteries), heart failure and heart attack, Harvard Health Publications reports. A 2011 study from Warwick Medical School researchers found that inadequate shut-eye was tied to heart attack risk, as well as cardiovascular disorders and stroke. "If you sleep less than six hours per night and have disturbed sleep you stand a 48 percent greater chance of developing or dying from heart disease and a

15 per cent greater chance of developing or dying of a stroke," [lead author Francesco Cappuccio said in a statement on the findings](#), which were published in the European Heart Journal. "The trend for late nights and early mornings is actually a ticking time bomb for our health so you need to act now to reduce your risk of developing these life-threatening conditions."

sperm count decreases. Besides the obvious fact that exhaustion isn't typically conducive to getting busy, skipping your Zzs can take a hit on fertility. [A 2013 study](#) published in the American Journal of Epidemiology of 953 young men in Denmark found that those with high levels of sleep disturbances had a 29 percent lower concentration of sperm in their semen.

risk of death goes up. [A SLEEP study](#) evaluating 1,741 men and women over the course of 10 to 14 years found that men who slept fewer than six hours had a significant increase in mortality risk, even after adjusting for diabetes, hypertension and other factors.

This story appears in Issue 87 of our weekly iPad magazine, Huffington, available Friday, Feb. 7 [in the iTunes App store](#).

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