

The 7 Reasons Your Kid Needs Sleep

Getting your kid to bed early has more benefits than just a few hours of quiet time at night. New research explains how vitamin ZZZ may help children fight obesity, avoid colds, and succeed in school.

By Sarah Mahoney from [Parents Magazine](#)



Once it's 7:45 p.m., all is quiet at the Tanaka house in Los Angeles. Presley, 6, James, 4, and Jase, 2, are all sleeping soundly. "My husband and I sleep-trained them at an early age, and our routine is nonnegotiable," says Caroline, who works from home as a publicist. "They have a bath, brush their teeth, say a prayer, and get a story. Then it's lights-out. I'm convinced that's why they have fewer meltdowns. They also don't get as many colds as other kids in their class."

The Tanakas are on board with the increasingly urgent public-health mission to help American kids (not to mention their chronically exhausted mothers and fathers) get more sleep. Parents have always felt that sleep directly affects a child's mood, and most would agree it's got a big impact on learning and behavior. But pediatric researchers' latest findings suggest that sleep is also essential to good health. When kids get the sleep they need, they may have a lower risk of becoming overweight and developing diabetes as well as fewer learning problems and attention issues. Sleep is as important as nutrition and exercise. It's when the body repackages neurotransmitters, chemicals that enable brain cells to communicate.

And experts have recently been able to demonstrate that sleep allows brain cells to "take out the trash" each night, flushing out disease-causing toxins.

Perhaps the most startling news from this research is how quickly kids fall into the danger zone. The repercussions of sleep deprivation are visible after only four nights of one fewer hour of sleep per night, found a study from Dalhousie University, in Nova Scotia. (This can happen during a school vacation, or when you have company for a holiday weekend, or even just by letting kids watch the World Series.) "I expected that we'd see some differences when kids get less sleep than usual," says senior author Penny Corkum, Ph.D. "But finding that they're so drastically affected in so short an amount of time is amazing."

You may realize that your child could use more shut-eye. "However, it can be very difficult to recognize all the ways that after-school and evening activities sabotage bedtime, and the damaging effects of allowing electronics into your kid's bedroom," says *Parents* advisor Jodi Mindell, Ph.D., associate director of the Sleep Center at the Children's Hospital of Philadelphia. Specialists like Dr. Mindell outline these crucial reasons all children need their daily dose of sound sleep.

1. Sleep promotes growth.

You've probably had mornings where you've sworn your baby got bigger overnight, and you'd be right. "Growth hormone is primarily secreted during deep sleep," says Judith Owens, M.D., director of sleep medicine at Children's National Medical Center, in Washington, D.C., and a *Parents* advisor. Mother Nature seems to have protected babies by making sure they spend about 50 percent of their time in this deep sleep, considered to be essential for adequate growth. Italian researchers, studying children with deficient levels of growth hormone, have found that they sleep less deeply than average children do.

2. Sleep helps the heart.

Experts are learning more about how sleep protects kids from vascular damage due to circulating stress hormones and arterial wall -- damaging cholesterol. "Children with sleep disorders have excessive brain arousal during sleep, which can trigger the fight-or-flight response hundreds of times each night," says Jeffrey Durmer, M.D., Ph.D., a sleep specialist and researcher in Atlanta. "Their blood

glucose and cortisol remain elevated at night. Both are linked to higher levels of diabetes, obesity, and even heart disease."

3. Sleep affects weight.

There's increasing evidence that getting too little sleep causes kids to become overweight, starting in infancy. One study from Penn State Children's Hospital has shown that when parents are coached on the difference between hunger and other distress cues and begin to soothe without feeding -- using such techniques as swaddling and swinging -- babies are more likely to be sound sleepers, and less likely to be overweight. Better yet? This coaching can begin when babies are 2 weeks old. The study followed the babies for a full year, and found that when parents used these techniques, it paid off. "Our intervention was the first to show that babies could actually be leaner in the first year," says Ian Paul, M.D., lead author and professor of pediatrics at Penn State College of Medicine.

That's key, because the sleep-weight connection seems to snowball. When we've eaten enough to be satisfied, our fat cells create the hormone leptin, which signals us to stop eating. Sleep deprivation may impact this hormone, so kids keep right on eating. "Over time, kids who don't get enough sleep are more likely to be obese," says Dorit Koren, M.D., a pediatric endocrinologist and sleep researcher at the University of Chicago.

Worn-out kids also eat differently than those who are well rested. "Research has shown that children, like adults, crave higher-fat or higher-carb foods when they're tired," Dr. Koren says. "Tired children also tend to be more sedentary, so they burn fewer calories."

4. Sleep helps beat germs.

During sleep, children (and adults) also produce proteins known as cytokines, which the body relies on to fight infection, illness, and stress. (Besides battling illness, they also make us sleepy, which explains why having the flu or a cold feels so exhausting. It forces us to rest, which further aids the body's ability to heal.) Too little sleep appears to impact the number of cytokines on hand. And it's been found that adults who sleep fewer than seven hours per night are almost three times more likely to develop a cold when exposed to that virus than those who sleep

eight or more hours. While there's little data on young children, studies of teens have found that reported bouts of illness declined with longer nightly sleep.

More Sleep Benefits

5. Sleep reduces injury risk.

Kids are clumsier and more impulsive when they don't get enough sleep, setting them up for accidents. One study of Chinese children found those who were short sleepers (i.e., fewer than nine hours per night for school-age children) were far more likely to have injuries that demanded medical attention. And 91 percent of kids who had two or more injuries in a 12-month period got fewer than nine hours of sleep per night.

6. Sleep increases kids' attention span.

Children who consistently sleep fewer than ten hours a night before age 3 are three times more likely to have hyperactivity and impulsivity problems by age 6. "But the symptoms of sleep-deprivation and ADHD, including impulsivity and distractibility, mirror each other almost exactly," explains Dr. Owens. In other words, tired kids can be impulsive and distracted even though they don't have ADHD. No one knows how many kids are misdiagnosed with the condition, but ruling out sleep issues is an important part of the diagnosis, she says. For school-age kids, research has shown that adding as little as 27 minutes of extra sleep per night makes it easier for them to manage their moods and impulses so they can focus on schoolwork. Kids with ADHD also seem to be more vulnerable to the effects of too little sleep. Parents are almost three times as likely to report that their child with ADHD has a hard time falling and/or staying asleep than parents whose kids don't have ADHD, says Dr. Owens.

7. Sleep boosts learning.

A baby may look peaceful when he's sleeping, but his brain is busy all night long. Researchers at Columbia University Medical Center have shown that newborns actually learn in their sleep: Investigators played certain sounds for sleeping newborns, followed with a gentle puff of air on their eyelids. Within 20 minutes, the sleeping babies -- who were between 1 and 2 days old -- had already learned to anticipate the air puff by squinting. And as for that twitching all babies do as they

snooze? It seems to be how their nervous system tests the connection between the brain and muscles.

Sleep aids learning in kids of all ages, and education experts are finding that naps have a particular magic. Neuroscientists at the University of Massachusetts Amherst taught a group of 40 preschoolers a game similar to Memory. Then the kids took a nap (averaging 77 minutes) one week and stayed awake the other week. When they stayed awake they forgot 15 percent of what they'd learned, but when they napped they retained everything. The kids scored better on the game not only after they'd just woken up but the next day too.

Making sure families get enough sleep isn't easy, especially with parents working longer hours, more elaborate after-school activities, bedrooms full of cool electronics, and the pressure to pack more into every day. "We've done a good job of teaching parents about why kids need to exercise and eat healthy foods," says Dr. Corkum. "Still, the simple fact is that kids sleep less today than they used to. And unless we make an effort to get that sleep time back, their health will suffer."

Build a Better Bedtime

The nice news in all of this: From early on, there is plenty you can do to help your kids grow up loving their zzz's.

- **Encourage self-soothing.** Try not to let your infant fall asleep while eating, and put her to bed when she's still awake. By 3 months, you should slow your response time when she wakes up crying at night. By 6 months, when most babies typically sleep through the night, consider giving up the monitor if your room isn't very far away. Or you can turn the volume down. You'll be less tempted to rush to your fussing baby, and she'll be more likely to drift back to sleep on her own.
- **Create a solid routine.** Children should have a consistent bedtime ritual by 3 months that lasts no more than 30 to 40 minutes, bath included, says Dr. Mindell. And for kids up to age 10, make sure bedtime is before 9 p.m. "Children who go to bed after 9 p.m. take longer to fall asleep, wake more often at night, and get less sleep overall," she says. Dr. Durmer also suggests sticking with the usual bedtime sounds, like recorded ocean waves or a fan, and favorite sleep-time objects, such as a special blanket or pillow.

- **Set the stage for sleep.** Try to maintain the same temperature and level of light in your child's room, even when on vacation, says Dr. Durmer. Shut off screens too, because research is mounting about the light generated by computers and tablets: Just two hours of screen time right before bed is enough to lower levels of melatonin -- a chemical that occurs naturally at night and signals sleep to the body - by 22 percent. Ditch devices after dinner.
- **Add another bedtime story.** You already know reading to kids helps them learn, but hearing storybooks is a great way for kids to head off to dreamland. "Of all activities, reading printed books appears to be most relaxing," says Michael Gradisar, a clinical psychologist at Flinders University, in Adelaide, Australia.
- **Run a sleep audit.** It makes sense to periodically measure your child's sleep time, especially if you're seeing trouble signs. (Alas, you'll need to do it the old-fashioned way: Wearable trackers can make mistakes with anyone, but they're especially inaccurate on kids, who move around more in all stages of sleep. A study found that one such device underestimated kids' sleep by an average of 109 minutes.)

"Parents may not identify a kid's daytime meltdowns as a sleep-related problem," says Ancy Lewis, a sleep coach in White Plains, New York. "However, when they track their child's sleep and make a consistent effort to get him to bed an hour earlier for a week, the problems get much better." This is especially helpful for preschoolers, who are transitioning away from naps. For older kids, each school year brings new activities and demands. Red flags include dozing off in front of the TV or in the car.

Special Needs and Sleep: A Connection

Children who have special needs often also have undiagnosed sleep-disordered breathing, including apnea and snoring, as well as multiple sleep-related disorders, says Dr. Jeffrey Durmer. Kids who snore are twice as likely to have a learning impairment; nearly two thirds of children with Down syndrome have sleep apnea. What's more, anywhere from 40 to 80 percent of children who have autism spectrum disorder also have sleep problems, such as greater difficulty falling asleep and waking up more often during the night.

"Children who have special needs are more vulnerable to outbursts when they have changes in their sleep patterns," says sleep coach Ancy Lewis, who has a son with

special needs. "Sleep deprivation can worsen any challenges that these kids face." So a regular sleep routine is even more important. In fact, a recent study concluded that providing families of children with autism with just an hour of individual coaching or four hours of group sleep coaching helps these kids sleep more consistently.

Slumber Numbers

Between 20 and 30 percent of children have experienced sleep problems, says Dr. Jodi Mindell. As many as 40 percent of kids have sleepwalked at least once, usually between the ages of 2 and 6, according to the National Sleep Foundation. And up to 6 percent may have night terrors. Some issues -- like snoring -- may seem harmless but can be a concern, so talk to your doctor if your child snores more than three nights per week.

caffeinated kids

New research from the U.S. Centers for Disease Control and Prevention shows that 73 percent of kids consume some caffeine on any given day, much of it from soft drinks, with energy drinks becoming increasingly popular. Meanwhile, the American Academy of Pediatrics suggests that kids shouldn't consume any caffeine. These are some of the most tempting drinks, a couple of which have far more caffeine than an 8-ounce cup of coffee (95 to 200mg).

| DRINK | OUNCES | MG OF CAFFEINE |
|-----------------------------|--------|----------------|
| Rockstar Punched Original | 16 | 240 |
| Go Girl Sugar Free Lemonade | 11.5 | 100 |
| Red Bull | 8.4 | 80 |
| V8 V-Fusion + Energy | 8 | 80 |
| Mountain Dew | 12 | 54 |
| Glacéau Vitaminwater Energy | 11.5 | 80 |

how much sleep is enough for your child?

Some kids may be wired to operate on a little less sleep than others, but the National Sleep Foundation suggests these guidelines:

| WHEN KIDS ARE ... | THEY NEED ... |
|-------------------|------------------|
| up to 2 months | 10.5 to 18 hours |
| 3 to 12 months | 9.5 to 14 hours |
| 1 to 3 years | 12 to 14 hours |
| 3 to 5 years | 11 to 13 hours |
| 5 to 12 years | 10 to 11 hours |

