

# Benefits of sleep for positive and healthy learning

## The 7 reasons Your child needs sleep

<http://www.parents.com/health/healthy-happy-kids/why-your-kid-needs-sleep/>

Getting your child 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.

Perhaps the most startling news from research into sleep and how it affects children is how quickly children can fall into the danger zone. The repercussions of sleep deprivation are visible after only four nights of *one fewer hour of sleep per night*. This can happen during a school holidays, or when you have company for a holiday weekend, or even just by letting children stay up late to watch a film or programme.



### 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 Centre, 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 children 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 children to become overweight, starting in infancy. 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 children keep on eating.

Worn-out children 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. 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. Too little sleep appears to impact the number of cytokines on hand. 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. Studies of teenage children have found that reported bouts of illness declined with longer nightly sleep.



#### **5. Sleep reduces injury risk.**

Children are clumsier and more impulsive when they don't get enough sleep, setting them up for accidents. One study of children who got fewer than nine hours per night for were found to be far more likely to have injuries that demanded medical attention.

#### **6. Sleep increases a child's 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. For school-age children, 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.

#### **7. Sleep boosts learning.**

Sleep aids learning in children of all ages and education experts are finding that sleep has a particular magic. 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. How to kick-start a decent nights sleep;

## **Build a Better Bedtime**

### **Create a solid routine**

Children should have a consistent bedtime ritual. For children 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. 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%. Ditch devices after dinner.

### Add another bedtime story

You already know reading to children helps them learn, but hearing storybooks is a great way for children 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.

## 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.

<b>how much sleep is enough for your child?</b>	
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