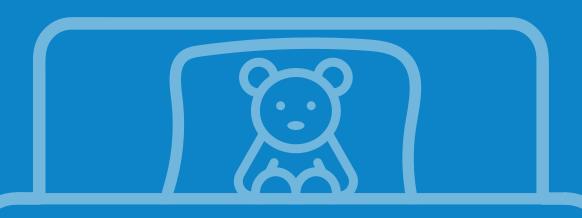


WAYS TO IMPROVE SLEEP FOR AUTISTIC CHILDREN

—— YOU CAN START TODAY ——



CONTENTS:

	Infroduction	3
	Signs of Sleep Deprivation	4
	Autistic Sleep Disorders	5
	11 Way to Improve Sleep for Kids with Autism	7
	Co-Sleeping & Autism	12
	Autism Sleep Study	13
	Takeaways	14
11 WAYS TO	Melatonin for Autism Sleep Issues	7
IMPROVE SLEEP:	Assess Your Existing Bedtime Routine	8
	Take a Close Look At What Your Child Is Eating	8
	Improve Day & Night Time Sleeping	9
	A Special Autism Bed Tent	9
	Consider Your Child's Bedroom Environment	10
	Add In a Sensory Diet & Exercise	10
	Aromatherapy & Essential Oils	11
	Consider Your Child's Bedding	11
	Get a Sleep Alarm Clock	11
	Increasing Natural Light-Exposure During the Day	12

INTRODUCTION 3

INTRODUCTION

One of the biggest struggles children with autism face is trouble sleeping. If this issue is resolved, it can have a positive effect on a lot of aspects of a child's life.

What are the signs of sleep deprivation, the most common sleep challenges kids with autism face, and most importantly, what are the ways to help? Read on!

SIGNS OF SLEEP DEPRIVATION

If your child is not getting the recommended amount of sleep, the effects can compound and sleep deprivation can result. It is recommended that preschool children receive 11-13 hours of sleep each night, school age children get 10-11 hours and teenagers have 8-10 hours of sleep each night.

SIGNS OF SLEEP DEPRIVATION CAN INCLUDE:

- 1. Irritability | Mood Changes
- 2. Daytime Drowsiness
- 3. **Behavioral Issues -**Hyperactivity, Aggression,
 Inattentiveness
- 4. Difficulties With Organization, Planning,
 Judgment
- 5. **Difficulties With -**New learning &
 Retention of Learned Skills
 (Memory)
- 6. Decreased Safety
 Awareness

Unfortunately, for children with autism, sleep problems occur more frequently are compounded by some of the stressors that are commonly associated with autism spectrum disorder.

AUTISTIC SLEEP DISORDERS

Autism Speaks estimates that over 80% of children with autism have sleep problems. Researchers are working hard to uncover exactly why the incidence of sleep disorders is so high in autistic children: Does the neurological and genetic makeup of the autistic brain and body contribute to sleep issues? Or, are issues with sleep contributing to commonly observed symptoms, behaviors, and learning difficulties associated with autism?

LESS TIME SPENT SLEEPING

In a study published in the Archives of Disease Control, it was reported that children with autism, aged 30 months to 11 years old, slept for 17-43 minutes less per day than their peers. The shortened sleep times were attributed to later bedtimes, earlier wake times, and night awakening (3+ times per night).

As the age of the research participants increased, the problems with night awakening increased as well (11% of children with ASD versus .5% of children aged 6.75 years). Sleep deprivation is thought to exacerbate some of the social, behavioral, and cognitive skill issues associated with autism.

LESS TIME IN REM SLEEP CYCLES

Research has also indicated that children with autism spend less time in the critically-important REM sleep cycle than other peers (15% compared with 23%). Since this is the restorative phase of sleep where the day's information, experiences, and memories are consolidated, researchers are examining the role this lack of REM-sleep plays in the learning difficulties associated with autism.

AUTISTIC SLEEP DISORDERS 6

DIFFICULTY FALLING ASLEEP

Another common sleep problem with children with autism is difficulty falling asleep. Each of our bodies has a 24-hour sleep-wake pattern called a circadian rhythm. These circadian rhythms are controlled by the hypothalamus of your brain and are essential to falling asleep and waking in a regular time-frame.

The hypothalamus controls the brain's release of melatonin, which helps your body become tired. Research has found that people with autism have elevated melatonin levels during the day, and lower levels of melatonin at night - this is the opposite of what should be the case.

This dysregulation of melatonin levels can contribute to a disruption of the body's circadian rhythm, meaning parents have to work extra hard to make a non-drowsy child ready for bed!

Additionally, researchers are examining the role that genetics plays in the autism-sleep relationship. Recent research has found more than twice the genetic mutations of circadian genes in people with autism. Scientists continue to explore what mutations are indicators of sleep disorders and whether or not these specific mutations are unique to autism or found in other neurotypical sleep-disordered people.

If you haven't realized by now, there is no easy answer for figuring out the origination and/ or solutions for sleep disorders! To further complicate the issue, children with autism have additional considerations when looking at what could contribute to sleep disturbances:

- Comorbid diagnoses like anxiety, restless leg syndrome, epilepsy
- Side effects of medication(s)
- Neurological diagnoses
- Sensory dysregulation
- Gastrointestinal problems
- Behavioral rigidity associated with a bedtime routine

Now that we've covered the sleep issues those with autism may be struggling with, we want to give you the 11 Best Ways to Improve Sleep for Kids with Autism.

11 WAYS TO IMPROVE SLEEP FOR KIDS WITH AUTISM

Finding the right combination of tools, strategies, and routines will take some trial and error. As you trial sleep tools and make changes to routines and environments, be sure to keep a sleep log or sleep journal. Subtle changes can have drastic effects on your child's behavior, so keep track of your observations by writing it down.

Consider jotting down diet changes, bedtime adjustments, the frequency of wake-ups, wakeup times, and behaviors completing the bedtime routine.

Even small changes can add up to a big difference over time and it's too easy to lose sight of your efforts without the written log.

Now, let's get started on actionable tools and strategies to help your child sleep better!



Melatonin for Autism Sleep Issues

Some doctors and parents are combining behavioral approaches to sleep issues with over-the-counter melatonin. Melatonin is a hormone that is naturally produced by the pineal gland during the sleep cycle and it has been used as a supplement to treat sleep disturbances in kids with ADHD and autism.

A study in the 2008 Journal of Child Neurology researched the effects of melatonin in the treatment of insomnia in children with autism and found that 60% of parents reported improved sleep. The 2006 Journal of Autism and Developmental Disorders reports that long-term melatonin treatment was effective overall and no safety concerns were found for continuing melatonin treatment.

As with all over-the-counter medications, you want to ensure the correct dosage for your child. Believe it or not, melatonin is not regulated by the Food and Drug Administration (FDA) so the dosages vary by manufacturers and medication form (pill, liquid, dissolvable lozenge).

Because some children with autism are also on psychotropic medications, finding the right dose of melatonin can be a tricky task so it's best to work with your pediatrician to consider all of the variables that are specific to your child.

According to Dr. Craig Canapari, director of Yale Pediatric Sleep Center, "In general, I would start at a low dose (0.5–1 mg) and increase slowly. Recognize that melatonin, unlike other medications, is a hormone and that lower doses are sometimes more effective than higher ones, especially if the benefit of it reduces with time."



Assess Your Existing Bedtime Routine

Establishing a consistent bedtime and bedtime routine can help your child begin to calm himself down. This routine is important for all children, but even more so for children with autism.

A warm (not hot) aromatherapy bath, short story, and lotion massage can help offer calming sensory input while providing visuals of the routine supports predictability and understanding.



Take a Close Look At What Your Child Is Eating

You may be surprised at the sugar content in common kids snacks! As adults, we're mindful of limiting sugars and caffeine as we approach bedtime, but don't forget to consider how your child's diet may be impacting their sleep readiness. Also be mindful of the nutrients that are lacking in your child's diet. Foods that contain tryptophan, magnesium, calcium, vitamin B6, and naturally-occurring melatonin may be helpful additions to your child's dinnertime meal!

For more information on foods that affect sleep, check out this resource here.



Improve Day & Night Time Sleeping

Natural and environmental lighting plays a role in our sleep-wake cycle and it's not always a positive effect! Certain kinds of lighting affect one's arousal level more so than others.

For example, daylight and fluorescent lighting are stimulating. Limiting screen time 2 hours prior to bedtime and avoiding brightly lit rooms will help regulate your child's circadian rhythm.

Research has supported that red-hued bulbs do not affect the circadian rhythms, so if a nightlight is needed, consider swapping out the typical bulb for a red-hue.



A Special Autism Bed Tent

Companies are now making enclosed beds, or bed tents, which provide a contained, cozy, safe space for sleep.

There are many styles – separate free standing units, pop-up types that rest on top of the mattress and after-market canopies that strap to the bed frame itself. Some are inflatable, portable and easy to assemble.

You can find bed tents with varying safety measures built in to prevent elopement. Some of these beds for autism can be bolted to the floor, or easily moved within the room, while others allow more flexibility for travel, allowing families to potentially spend a night in a hotel, or at grandmas house.



Consider Your Child's Bedroom Environment

From the window coverings, to the colors on the walls, and the noises in between. Your child's bedroom should be a calming retreat that offers sensory deprivation when it's time to calm down.

A white noise machine can help filter out some of the extraneous hallway or outdoor noises that may be disruptive to your child falling or staying asleep.

Black-out curtains or roller shades are effective ways to block excess light from peeking through the window to wake your child up earlier than needed!

Darker colors on walls will foster better sleep than lighter colors, so consider repainting in a darker hue that won't reflect the light as much.

For more tips on designing a bedroom with sleep in mind, check out this article.



Add In a Sensory Diet & Exercise

All of these sensory activities promote regulation and the hormones released are also involved in sleep. So, encourage sensory activity throughout the day to support your child's sleep patterns but be mindful of stopping alerting sensory activities one hour prior to bedtime.

8.

Aromatherapy & Essential Oils

Lavender, vanilla, chamomile can be used in bedtime sprays, lotions, and essential oil baths to promote calm. This aromatherapy article outlines some popular insomnia solutions using essential oils.

9.

Consider Your Child's Bedding

The textures of the sheets, pillows, and comforters should be sensory-preferred and snuggly soft.

Some parents find that oversized pillows or stuffed animals offer additional sensory input for squeezing, hugging, and burrowing.

Consider a heavy duvet/down comforter or a specifically-designed weighted blanket. Weighted blankets have been found to offer deep touch pressure which can positively impact sleep behaviors.

10.

Get a Sleep Alarm Clock

If your child has difficulty knowing when it's officially "wake-up" time or oversleeping, try adding a sleep-smart alarm clock that specifically targets their needs.

OK to Wake Alarm Clock - Good for kids who wake up early and need to learn to wait in bed until a reasonable hour! This clock glows a green color when it's wake up time (you set the time).

CO-SLEEPING & AUTISM 12

Wake Up Light - Good for kids who have trouble waking up. This alarm clock simulates a natural lightening when it's time to wake. Another bonus is that it can act as a nightlight in any color hue (including red!)



Increasing Natural Light-Exposure During the Day

More natural light is very good for our natural cardiac rhythms and can improve our sleep cycles at night. Schedule at least 10 minutes of outdoor play in the early morning, noon, and at dusk.

Explore the use of a light box as a tool for light therapy. This is especially helpful in the winter months or if you live in an area that isn't rich in sunshine year-round!

CO-SLEEPING & AUTISM

The desperation of sleepless parents is a reality that forces many families to resort to co-sleeping with their child in a last-ditch effort to get some shut-eye. If your child is known to climb out of his crib in the middle of the night or wander around the house while the rest of the family is fast asleep, co-sleeping offers peace of mind and an element of safety.

It's an understandable and common adjustment that families often make out of resignation and frustration.

If you choose a family bed, keep in mind that your sleepless child with autism will soon become a teen... and then an adult! It will get more difficult to accommodate a larger body in bed with you, especially if behavioral issues associated with sleep disruptions escalate over time.

AUTISM SLEEP STUDY 13

Consider consulting with a behaviorist who can come into your home and work with your family to identify alternate solutions or a way to move from the family bed to another sleep setup. Sometimes recommendations are made for a cot, sleeping bag, or mattress placed adjacent to the parent's bed to transition the child to a more independent sleeping arrangement in a gradual way.

AUTISM SLEEP STUDY

If you are interested in seeking more information about exactly what your child's sleep patterns are, there are sleep centers that will conduct sleep studies. While these tend to be more invasive and a last-resort for families, they do offer helpful insight and possible additional solutions.

TAKEAWAYS

Sleep is a complex issue that doesn't always have an easy one-size-fits-all solution, especially when you're a child on the autism spectrum. Fortunately, there are many sleep-specific resources and products available to help you create your own sleep tool-kit.

Finding your just-right sleep solution might be a lot like picking out your new mattress though -- you may have to try a bunch before you find the right one!

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Content written by Alescia Ford-Lanza MS OTR/L, ATP | Site