

# Sleep Better!

## A Guide to Improving Sleep for Children with Special Needs

### Revised Edition

by

**V. Mark Durand, Ph.D.**

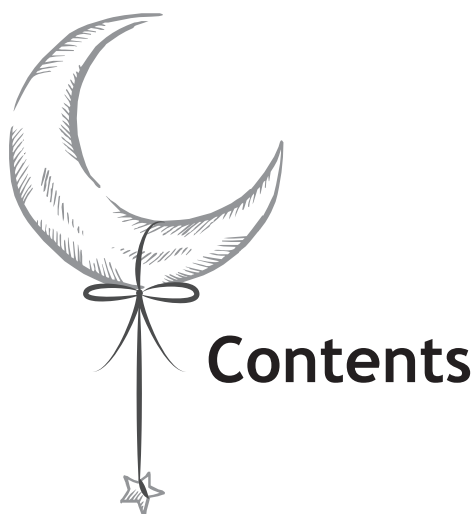
University of South Florida St. Petersburg

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Excerpted from Sleep Better!  
A Guide to Improving Sleep for Children with Special Needs, Revised Edition  
by V. Mark Durand, Ph.D.

Brookes Publishing | [www.brookespublishing.com](http://www.brookespublishing.com) | 1-800-638-3775



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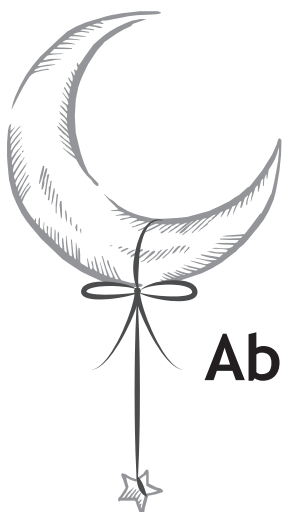


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## About the Author

**V. Mark Durand, Ph.D.**, is known worldwide as an authority in the area of autism spectrum disorder. He is Professor of Psychology at the University of South Florida St. Petersburg (USFSP), where he was the founding Dean of Arts and Sciences and Vice Chancellor for Academic Affairs. Dr. Durand is a fellow of the American Psychological Association and has received more than \$4 million in federal funding to study behavior problems in children with disabilities.

Dr. Durand was awarded the University Award for Excellence in Teaching at the State University of New York–Albany in 1991 and in 2007 was given the Chancellor’s Award for Excellence in Research and Creative Scholarship at USFSP. Dr. Durand is currently a member of the Professional Advisory Board for the Autism Society of America. He is the coeditor of the *Journal of Positive Behavior Interventions* and has written 12 books, including abnormal psychology textbooks that are used at more than 1,000 universities worldwide (translated into Arabic, Greek, Spanish, Portuguese, French, Hindi, and Chinese). In addition, he has more than 100 research publications.

Major themes in Dr. Durand’s research include the assessment and treatment of severe behavior problems for children and adults with autism, parent training, and the development of treatments for child sleep problems. He developed one of the most popular functional behavioral assessment instruments used today—the Motivation Assessment Scale (MAS; Monaco & Associates, 1992)—that is now translated into 15 languages.





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#### About the Author

Dr. Durand developed a unique treatment for severe behavior problems—called *functional communication training*—that is used worldwide. More recently, he developed an innovative approach to help families work with their challenging children and published a guide for parents and caregivers parents and caregivers of children with challenging behavior (*Optimistic Parenting: Hope and Help for You and Your Challenging Child*; Paul H. Brookes Publishing Co., 2011). The book has won several national awards.

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## Good Sleep Habits

We now know that what and when we eat and drink can affect our sleep and that our sleep can be affected by when we exercise, the temperature in our bedroom, any noise, and even what we do in bed. Everyday activities that we tend to take for granted can impact how well we go to sleep and if we stay asleep. Along these lines, there are a number of good sleep habits that should be followed if sleep is disturbed. Remember, what disturbs one person's sleep may not affect another's. You may be able to fall asleep with the television on, but the television in your room may be disturbing the sleep of your child in the next room. Coffee after dinner may not disrupt your friend's sleep but may keep you up long after your typical bedtime. We each react in our own way to many of the foods and activities of the day, so it is necessary to check the important ones to see if they are interfering with a good night's sleep.

Before describing some of these good sleep habits, let us first take a look at the case of a child for whom simply changing some sleep habits dramatically improved his sleep.



### ☆ **HARRY**

**H**arry was a 5-year-old boy who had an intellectual disability and who would resist going to bed at night. Harry's mother reported that he usually slept through the night and that he did not appear tired during the day. Unfortunately for Harry's mother, he did not appear tired in the evening either. Harry was a very likeable boy who seemed to have a great



deal of energy. At bedtime, which his mother decided should be at 9 p.m., he would like to wrestle and jump on his bed. At times, his mother would try to get him to lie down, but he would bounce up immediately. On other nights, she felt that maybe she would “tire him out” by letting him be rambunctious. She would wrestle with him, chase him around the house, sit with him to have his evening snack, and on summer evenings, go for a walk or run with him. Harry’s mother was astonished at her son’s ability to remain awake and alert—which seemed to surpass her own ability by far. One night, they were up until 2 a.m., with Harry showing no signs of letting up.

One of the first things that was obvious to us when we consulted with Harry’s mother was his activity at night. Harry was very active right up until bedtime. His mother believed that the more active she allowed her son to be, the more likely Harry would be tired at bedtime. Unfortunately, as we have discussed before, many times the opposite is true—exercise can actually interfere with sleep. Letting Harry run around the house, jump up and down on his bed, and go for evening runs may have been raising his internal body temperature, which in turn may have made him less likely to be drowsy at bedtime. Our first recommendation was to try to curtail Harry’s more vigorous activities, at least for the hour before bedtime.

A second factor that may have been interfering with Harry’s ability to fall asleep at bedtime was the lack of any stable bedtime routine. When 9 p.m. came around each evening, his mother would tell Harry it was time for bed. She would help him wash up, but other than this brief activity, there were no other rituals that would help Harry transition from play time to bedtime. We helped his mother design a calming bedtime routine for the 30 minutes before she wanted him to sleep in order to help Harry get ready for bed.

Another factor that we thought might be interfering with Harry’s ability to fall asleep at night was his evening snack. Just before washing up for the night, Harry’s mother allowed him to have a snack, which he enjoyed because he seemed hungry and it also seemed to be one of the few quiet and pleasant times they shared in the evening. Weight was not a problem for Harry; in fact, he was on the thin side, which concerned his mother, so she allowed Harry to pick his own snack each night. Harry’s favorites were chocolate-covered cookies and a Coke. The problem with this snack is that both the cookies and Coke contain caffeine and may have contributed to Harry’s late-night energy. Because snack time seemed to be a positive ritual for both Harry and his mother, we recommended that they keep this activity but substitute milk and nonchocolate cookies for Harry’s snack.

One more factor about bedtime may have contributed to Harry’s difficulty going to sleep. When he was not sleeping, Harry’s bed was the

wrestling ring. This is where he and his mother would good-naturedly wrestle and fool around each night. The problem with this arrangement was that Harry probably associated his bed more with fooling around than with sleeping. It may have been difficult for him to get into bed at 9 p.m. and turn it all off after an evening of fun and excitement. Again, because wrestling was something Harry and his mother both enjoyed, we recommended that they move their wrestling ring into the living room and reserve Harry's bed for his bedtime story and sleep.

After following these four simple recommendations alone—limiting activity in the hour before bedtime, creating a calming and stable bedtime routine, removing foods and drinks containing caffeine from his evening snack, and limiting activity in his bed to stories and sleep—Harry seemed more tired at bedtime, and he quickly got into the habit of falling asleep within about 15 minutes of being put into his bed. In fact, we were about to present his mother with a more elaborate plan for his bedtime problems when she called excitedly to tell us that Harry was now no trouble at bedtime.

## THE GOOD SLEEP HABITS CHECKLIST

As we saw quite dramatically in the case of Harry, there are often simple things that we can change that will positively affect sleep. Figure 6.1 shows a checklist to help you identify things you or your child may be doing that interfere with bedtime or cause night waking. Regardless of the sleep problems you may be experiencing, everyone should probably check this list to see if certain habits have developed that may be contributing to the problem. We next discuss some of the factors that may be at the root of your child's sleep difficulties.<sup>1</sup>

## BEDTIME ROUTINES

We have mentioned before that most children seem to thrive on structure and order. Whether this order includes the rules you make about how to eat at the dinner table, how to behave in public, or how to sit in a car seat when traveling, children soon learn what to expect of most situations and accept the structure—if you are consistent. This is especially important at bedtime. There are children who, when their parents say it is time for bed, kiss them goodnight, climb into bed, and fall asleep within minutes (It is true—I have seen it happen—although not with my son!). However, most children need a *wind-down time*, a time to help them with the transition to sleep. Any



### The Good Sleep Habits Checklist

- ☐ Establish a set bedtime routine.
- ☐ Develop a regular bedtime and a regular time to awaken.
- ☐ Eliminate all foods and drinks that contain caffeine 6 hours before bedtime.
- ☐ Limit any use of alcohol.
- ☐ Limit any use of tobacco.
- ☐ Try drinking milk before bedtime.
- ☐ Eat a balanced diet, limiting fat.
- ☐ Do not exercise or participate in vigorous activities in the hours before bedtime.
- ☐ Do include a weekly program of exercise during the day.
- ☐ Restrict activities in bed to those that help induce sleep.
- ☐ Reduce noise in the bedroom.
- ☐ Reduce light in the bedroom.
- ☐ Avoid extreme temperature changes in the bedroom (i.e., too hot or too cold).

Figure 6.1. The good sleep habits checklist.

relaxing series of activities that you and your child choose to include can be successful. For example, when my son was younger, we would have him brush his teeth, wash up, and change into pajamas. Then we would sit on his bed and read to him for 15–20 minutes. This would be followed by back scratching and kisses, and then the words, “Okay, it’s time to sleep. Goodnight.” We would do the same things in the same order each night. This type of routine seems to have a calming or sedating effect on most children and helps them to associate this time with sleep. We recommend some type of bedtime routine for *everyone*, including adults who have difficulty falling asleep at night. Often this one change can help someone who previously had a great deal of difficulty falling asleep.

### The Dos and Don’ts of Bedtime Routines

- Do make the last 30 minutes before bedtime a regular routine.
- Do include activities such as dressing for sleep, washing, and reading.
- Do keep the order and timing of the activities about the same each night.

- Do not include activities that—for your child—could cause conflict (e.g., picking out clothes for school, organizing papers).
- Do not watch television during this time, which can interfere with sleep.
- Do not extend the time for the bedtime routine (i.e., “Just one more story? Pleeese!”).
- Remember the most important Do: DO WHAT WORKS FOR YOU.

***The “Out of Control” Child*** As I discussed in the previous chapters, many parents feel that things are so out of control that there is no way they can impose a bedtime routine and expect their child to accept it. These are parents who often have a great number of problems with their child and, unfortunately, in other parts of their lives and feel powerless to recapture control. These parents often say that their children are “uncontrollable” and that nothing seems to work with them. They often admit with some guilt that they have tried punishing their child, but he or she seems immune to such punishment.

I usually begin to talk to parents who feel that they have no control over what their children do by discussing their children and the things they do during the day. Often we can find any number of things that the child does when instructed, an obvious sign that the child is not uncontrollable. And, in the most difficult cases, I can point out that they, like all parents, get their children to go to school. When I point this out, the parents’ demeanor often changes, and they say quite confidently, “Of course he or she goes to school each day. There is no way my child is going to miss school.” This is the key. If you can get your child to do one thing consistently, then you should be able to make it two things, then three things, and so forth. For many families, the difference between getting a child to go to school and having him or her go to bed is one of personal resolve rather than ability. Our society has made it very clear that all children go to school. In fact, if a child does not go to school, the parent is viewed as irresponsible and, in extreme cases, can be sent to jail. Because we do not accept any alternatives, the rate of school refusal (the number of children who refuse to go to school) is quite low compared to other problems children experience. We have to teach parents how to have the same resolve for other essential demands that they need to place on their children and give them the techniques to help them carry this out. If

you feel unable to place this structure on your child because you are concerned that he or she will become too disruptive, refer to Chapters 4 and 5 for helping change these thoughts and to Chapter 13 for some suggestions on how to deal with these problems outside of bedtime.

It is also important to point out that *you* should direct the bedtime routine. This is not to say that your child should not have a say as to what activities should be included in these routines. Your child's input is crucial. However, if you find that the bedtime routine is becoming longer and longer and more elaborate, it is time to regroup and take control. This happened to me. My son enjoyed his bedtime routine so much that he often wanted just one more minute of back scratching. Then it became one more round of kisses. He then seemed to build in an extra stop to the bathroom, followed by one more trip to get a glass of "cold water," which had to come from the refrigerator. Our routine, which previously had been about 30 minutes, now began to take almost an hour. He obviously wanted to avoid going to sleep at all costs.

If you find your routine taking on more and more activities and becoming longer and longer, you may need to consider that your child is using this to delay bedtime. If you both enjoy this time and have no problem with a bedtime routine longer than 30 minutes, there is no real need to change things. However, if this extra time is cutting into the amount of time your child sleeps and it is becoming a concern, you may need to start again with the original routine and make clear when it starts and ends. There will probably be some initial resistance to this reduction in time; however, your child should adjust within a few days or weeks.

***Bedtime Routines for Children with Autism Spectrum Disorder (ASD)*** One word of caution about bedtime routines should be made for children with ASD. It is frequently the case that these children latch on to routines so strongly that they become rituals. The difference here is that, for some children with ASD, if you try to vary their ritual even the slightest bit, this can result in a major tantrum. One child we worked with established his own bedtime routine. He would set up his extensive collection of stuffed animals around the bed, a task that could take 15 minutes given the large number he had to arrange. Unfortunately, if one of the animals was out of place or missing, he could not go to sleep. To complicate matters, if he happened to wake up at night and find the animals moved—which sometimes happened

because of his moving around in bed during sleep—he would scream and cry until his mother came into his room to fix things.

There were a number of reasons why we did not try to get this boy to immediately give up his ritual. It was important to note that he seemed to like arranging his stuffed animals, and he had few activities that seemed to give him as much pleasure. We obviously did not want to take away what appeared to be his one pleasure in life. His mother also did not want to take on the challenge of changing this ritual (which would have resulted in weeks of severe disruption), and we all felt that any attempt to do so would probably be unsuccessful. Instead, we first taught him how to rearrange his own stuffed animals after he woke up. We taught his mother not to put back the animals herself when he woke up screaming but instead to prompt him to do it himself. Although this was at first rather difficult—he would cry longer—after a few weeks, he was doing it with his mother's prompting. Soon the boy was not crying at night at all but was presumably getting up, fixing the toys, and going back to sleep. In addition to this recommendation, we also suggested that his mother encourage new arrangements from time to time to get him to accept new variations. Two months after our initial contact with this mother, she was reporting that her son was going to bed more easily and was not waking up crying as he had for years before. Parents of children with ASD should be cautious when introducing new routines and should consider building in variation—for example, changing the order of the activities each night—from the very beginning.

***Bedtime Routines for Children with Attention-Deficit/Hyperactivity Disorder (ADHD)*** Parents of children who have been diagnosed with ADHD often report that one of the sleep problems their children experience is taking a long time to go to sleep. This may be related to ADHD or to the medication many of these children take each day (see Chapter 14 for a discussion of medication and sleep). Whatever the cause, bedtime routines may take much longer for these children. One recommendation we often make is to allow a longer than usual bedtime routine for children who seem to need more time to wind down. If after a few weeks of a 1-hour bedtime routine that the child seems to accept, you can decide if you want to change the time. Again, if this extra time seems to be interfering with sleep or is difficult to manage, we then help parents fade back the routine until it approximates the 30 minutes recommended. We do this slowly, by





decreasing the routine from 60 to 50 minutes. If after 2 weeks the child has adapted to the 50-minute routine, we cut back the time to 40 minutes, and several weeks later if all is well, to 30 minutes. Fading back the bedtime routine often lets us avoid fighting over bedtime and lets the child slowly adapt to the restriction. It is important to note that fading routines, as with any of the recommendations made in this book, will need to be individually assessed. For example, if your child is doing well with 60 minutes but becomes difficult to manage when you move it back to 50 minutes, try 55 minutes instead. Remember that bedtime routines should be a calming time and not a time for fights. If fading the time is too disruptive no matter how you break it down, consider some other alternatives, such as those described in Chapter 9 (Sleeping at the Wrong Times).

## REGULAR SLEEP TIMES

We are creatures of habit. For the most part, our bodies work best when we have a fairly regular schedule. Being irregular in our sleep-wake habits can negatively affect some people. One family we worked with completed the sleep diary for us prior to our interview. We found that their 3-year-old daughter would sometimes be put to bed at 10 p.m. and other times as late as 2 a.m. Bedtime was determined by her parents' schedule rather than when the little girl seemed tired. In fact, the parents did report that they tried to keep her up late on some nights because they wanted some alone time in the morning and hoped that keeping her awake the night before would make her sleep late the next morning. Other times when they wanted her to go to sleep, she would remain awake and would often awaken in the middle of the night. It seemed pretty clear that the girl's lack of a regular sleep-wake schedule was contributing to her disturbed sleep.

It is important to point out that in addition to a consistent bedtime routine, children and adults who have difficulties with their sleep should be sure to have consistent times that they go to bed and wake up each day. Providing your child with this structure may help prevent him or her from waking up at night and can help with bedtime problems. We typically help parents design good sleep-wake times by looking at the sleep diary and seeing how long their child typically sleeps. We then compare that time with what is typical for a child that age (see Chapter 1) and try to guess how long this child should sleep to be properly rested. Then we look at the wake time the child will

need for school, or if a parent needs the child to be awake for another reason (e.g., day care) and work backwards. For example, if we find that 10 hours seems to be about the right amount of sleep time, and the child needs to be awake by 7 a.m. for school, then we suggest that bedtime (the time when the bedtime routine ends) should be no later than 9 p.m. If bedtime is a problem for this child or if he or she wakes up frequently during the night, then we often suggest sticking to this 9 p.m. to 7 a.m. schedule each day. Weekends can be varied somewhat (e.g., 10 p.m. to 8 a.m.), although you want to avoid dramatic changes. People have difficulty adjusting to new schedules, especially when the schedules require going to bed earlier than they are used to, so Sunday night may become a problem if your child stays up too late on Friday and Saturday nights.

## Finding Sleep-Wake Times

- Use your sleep diary and Figure 1.1 to find the number of sleep hours your child seems to need to be rested (e.g., 10 hours).
- Determine a good wake time that fits with you and your child's schedules (e.g., 7 a.m., an hour before she needs to leave for school).
- Move backwards from your desired wake time the number of optimal sleep hours to find the best bedtime (e.g., 7 a.m. minus 10 hours = 9 p.m. bedtime).
- Try to stay with this sleep-wake schedule each day.

Although we recommend a consistent sleep-wake schedule for everyone, sometimes parents take this too seriously and become rigid in their scheduling. It is good to have fun. In fact, if life is too boring, this too can interfere with sleep. Try to keep to a regular schedule but do not be too concerned if you vary from it on occasion.

## CAFFEINE

We all know that coffee contains caffeine. Caffeine is a naturally occurring chemical that acts as a stimulant to our brain. It has been used for centuries by people to give them more energy. Unfortunately for us, caffeine can also seriously interfere with our ability to fall asleep at night. What most people do not realize is that caffeine stays in our system, acting as a stimulant for up to 6 hours. This means that the cup of coffee you drink after dinner at 7 p.m. may still be affecting



you at midnight. As is the case with most drugs, caffeine affects us each differently. Some are very sensitive to its effects, whereas others could fall asleep even after having two cups of coffee.

It is important to be aware of foods and drinks that contain caffeine and to try to avoid consuming them in the hours prior to bedtime. As you can see in Table 6.1, in addition to coffee, a number of other common foods and drugs have sufficient caffeine that may interfere with sleep. Tea contains less caffeine than drip coffee, but one cup has enough to keep you awake at night. Chocolate, especially the kind used in baking, contains a fair amount of caffeine, which means eating too many chocolate chip cookies before bed can be the culprit of bedtime problems. Coke and Pepsi have a fair amount of caffeine—probably enough to keep most people awake if they drink 8 ounces or more before bedtime. Other soft drinks such as 7-Up, Sprite, and Fresca are essentially caffeine-free and are therefore good substitutions for people who really enjoy sodas. Most people are unaware that certain nonprescription drugs contain significant amounts of caffeine. As you can see in the table, certain over-the-counter weight control drugs, diuretics (drugs designed to increase the discharge of urine), cold and allergy medicines, and even some pain relief drugs contain significant amounts of caffeine. You should check to see if your child is consuming caffeine in significant quantities anywhere up to about 6 hours before the desired bedtime and, if so, try to find caffeine-free substitutions.

## ALCOHOL AND TOBACCO

It is midnight, and you are still wound up from a hectic day. You can already tell that you will not be able to fall asleep easily tonight, so you fix yourself a drink. Within a few minutes, the alcohol seems to work its magic—the tensions of the day are fading, and you look forward to getting into bed. You put your head down on the pillow and fall asleep within minutes. This same scenario is played out in thousands of homes each night across the United States and may describe your own occasional sleepless night. The problem is that alcohol is a wolf in sheep's clothing when it comes to sleep. Although it can relax you at bedtime and help drive out thoughts that may be interfering with your sleep, alcohol can also disrupt your sleep enough during the night to more than cancel out any helpful effects. If you think about it, this can obviously lead to a particularly vicious cycle for people who

Table 6.1. Common sources of caffeine

Item	Milligrams of caffeine
Coffee (6 fl. oz.)	
Brewed	103
Instant	57
Decaffeinated	2
Tea (6 fl. oz.)	
Black	36
Instant	31
Iced	11
Chocolate	
Chocolate chips, semisweet (6-oz. package)	105
Baker's semisweet chocolate (1 oz.)	13
Milk chocolate (1.55-oz. bar)	11
Chocolate milk (8 oz.)	8
Cocoa beverage (6 oz.)	4
Selected soft drinks (12 oz.)	
Mountain Dew	54
Coca-Cola	46
Pepsi-Cola	38
RC Cola	18
7-Up, Sprite	0+
Nonprescription drugs (standard dose)	
Weight control aids	168
Diuretics	167
Alertness tablets	150
Analgesic/pain relief tablets	41
Cold/allergy remedy	27

From Pennington, J.A.T., & Spungen, J. (2010). *Bowes' and Church's food values of portions commonly used* (19th ed., pp. 283-291). Philadelphia: Lippincott-Raven Publishers; reprinted with permission.

worry about their sleep. Consider the person who is concerned that he may not fall asleep soon enough and therefore drinks at bedtime in order to fall asleep at a good time. His sleep will be restless because of the alcohol, and it will disrupt the deep, restorative sleep. The next morning, he will not feel rested. The next evening, he will be even more concerned about his sleep because he is so tired and tense about



not being rested. This will only serve to encourage him to drink again that night, which will in turn disrupt his sleep and start the cycle all over again. This vicious cycle is similar to what happens to people who use medications for sleep, sometimes resulting in dependence. The bottom line is that, despite its positive short-term effects on sleep (drowsiness), consuming alcohol within about 2 hours of bedtime can actually worsen your sleep.

Obviously, the use of alcohol is not a problem for the children who are referred to us for their sleep problems. However, alcohol and another drug we now discuss—the nicotine in tobacco—are used by some of the adults who are also referred to us for assistance. We often see adults with an intellectual disability who are living at home with their parents or who live in community residences. We have, on occasion, had to recommend that alcohol not be used as a sedative. More often, however, these individuals smoke, and the nicotine in the tobacco may be the source of their sleep problems.

Nicotine is a stimulant. Just like caffeine, nicotine serves to stimulate the nervous system. Smoking right before bedtime can result in an overstimulation of the brain, which interferes with sleep. Another problem for people who smoke is that, to maintain their “fix” of nicotine, they need to smoke fairly often throughout the day. The problem they have with sleep is that they can experience *withdrawal* during the night, and this can disrupt sleep. It is not surprising that many smokers light up almost as soon as they wake up in the morning because their brain is craving nicotine.

Remember that smoking cigarettes is not the only way of ingesting nicotine. Some people chew tobacco, and this too can act to stimulate the brain enough to disrupt sleep. The following is a description of one of our most intriguing cases that illustrates how nicotine can impair sleep.



## ☆ MICHAEL

Michael was an unusual individual who presented us with some unique challenges, only one of which was his sleep problem. My first contact with Michael was when he first arrived at the residential facility where I was working. He was 18 years old, had never been to school, and as far as we could tell, had spent a feral or semiwild existence in the rural mountains of Virginia. Both of his parents had some level of intellectual disability and

let Michael spend his days wandering in the woods. When he came to us, he had never used utensils to eat, was unfamiliar with toilets, and had never slept in a bed. He did not speak and appeared quite nervous, which was to be expected given his new and (to him) unusual surroundings.

The staff quickly grew to like Michael, who despite his background, seemed to have a good sense of humor. The staff spent a great deal of time patiently teaching him the skills he would need to be more independent. Michael rapidly learned how to feed himself using a fork and knife, how to use the bathroom, and how to take care of many of his personal needs.

Unfortunately, however, Michael's sleep became quite disrupted shortly after his arrival. He did not seem tired at bedtime, often sitting up in bed until 1 a.m. or 2 a.m. and then was difficult to awaken in the morning. When we questioned his social worker, who had known Michael for a number of years, she indicated that sleep had never been a problem for him. At first we thought that sleeping in a bed or in a strange bedroom might be the problem, because his sleeping difficulties seemed to start in the residence, but after several months where he seemed to adjust to most other routines, his sleep remained disrupted. His physician was about to order *chloral hydrate* to help him sleep, but this drug can have serious side effects, so we asked for more time to try to find the cause of his difficulties.

One of the habits that Michael was particularly resistant to changing was *pica*, or the eating of inedible objects. When he lived at home, Michael would pick up twigs or nuts from the ground and hold them in his mouth most of the day. He would also hide some of these small objects in parts of his clothing. At around the time we became most concerned about Michael's sleep, we had found bits of tobacco in the folds of his pants. We investigated further and found that he was picking up cigarette butts off of the ground outside, sometimes putting the tobacco in his mouth and sometimes saving some in his pants.

It seemed that this tobacco could have been keeping him up at night. We were also concerned that continued ingestion of enough tobacco over time could make him ill, so we set out to try to get him to stop eating cigarette butts. Unfortunately, Michael's ingenuity got the better of us. He quickly surmised that we did not want him to pick up the cigarettes, so he would wait for some opportune time when we were not looking to bend down, pick one up, and pop it in his mouth. In fact, our efforts at surveillance seemed to make him more interested in cigarettes.

Accepting defeat, we decided to take a more thoughtful approach to this habit. Suppose we gave him chewing tobacco to keep in his pocket so that he could have tobacco whenever he wanted. If this stopped him from



picking up cigarettes off the ground, it would at least be more sanitary. We found that he stopped reaching for cigarettes butts altogether and was not swallowing the tobacco we gave him. Next, we decided to try to reduce the amount of chewing tobacco we gave him and instead replace it with some candy or gum. The nicotine gums or patches were not available at this time, or we would have tried one of them with Michael. Over the course of several months, we slowly and methodically reduced the chewing tobacco we gave him and gave him substitutes. After 3 months, he had only tiny amounts of tobacco and was sleeping on a regular schedule. His sleep seemed to improve as the amount of tobacco he chewed was reduced.

We recommend that you limit drinking alcohol and smoking cigarettes in the hours before bedtime. Perhaps more important for a person's overall health would be to quit—especially smoking—together. Be warned that, if a person stops smoking completely, he or she may experience an increase in sleep problems initially (this is why we tried to wean Michael off of tobacco slowly, to avoid him going after cigarettes on the ground again). Worsening of sleep problems can occur because the body will go through withdrawal symptoms that will interfere with sleep. In the long run, however, sleep should be improved.

## SLEEP AND DIET

Whether or not certain foods can help you sleep has been discussed for centuries. You may have your own family remedy—for example, warm milk and cookies—to bring on sleep at night. Fortunately, sleep researchers have investigated the helpful and harmful effects on our sleep of what we eat and drink. One of the traditionally recommended sleep aids—drinking milk before bedtime—seems to help bring on sleep for many people. Foods high in fat may disturb sleep, so it may be helpful to limit them. This does not mean that all fat should be eliminated, because fat can create a feeling of being full or satisfied and is necessary for proper hormone development. In addition, eating a well-balanced and healthy diet seems to assist people who have difficulty sleeping. Being healthy in general, which can be helped with a good diet, seems to be related to good sleep.

Certain foods that may bring on an upset stomach or heartburn during the night should be avoided. With this suggested avoidance, it is difficult to make specific recommendations because people have their own individual reactions to certain foods. Common problem



foods include heavily spiced foods, cucumbers and beans (which can cause painful gas later in the evening), and foods with monosodium glutamate (MSG). As many of you may know, MSG is often used in Chinese food (and is in meat tenderizers), although increasingly it is being left out or some restaurants will leave it out if requested. Experiment with certain foods and use the sleep diary to see if your child seems to respond negatively to anything specific (e.g., a bad night's sleep after eating Chinese food).

Some years ago, the naturally occurring amino acid *tryptophan* was touted as a cure for insomnia. This amino acid is found in foods that are rich in protein, such as milk, cheese, eggs, beans, and meats. It is believed that tryptophan may help sleep because our bodies break down this substance into the brain chemical *serotonin*, which in turn may help slow down our nervous system. This may be especially important for parents of children with ASD, because this disorder has been linked to serotonin production and may account for the high rates of sleep problems in this group (I also discuss serotonin and sleep in Chapter 14 when I describe the use of the naturally occurring hormone *melatonin* and its relationship to sleep).<sup>2</sup> For a time in the late 1980s, synthetic tryptophan was sold as a supplement in health food stores. Unfortunately, because of impurities in the manufacturing of some brands of the supplements, serious side effects were observed in some people taking this substance (e.g., blood disorders, rashes, aching muscles and joints), and it was removed from the market in 1989. Obviously, you can still receive the benefits from tryptophan (which tend to be mild) from eating protein-rich foods, and you may want to try assessing the effects of these foods on your sleep.

Finally, certain vitamins and minerals seem to have some limited positive effects on sleep. Vitamins such as B<sub>3</sub> (also known as *niacin*), B<sub>12</sub>, and another of the B vitamins, *folic acid*, appear to help some people sleep better. Taking a B complex multivitamin supplement each day for at least 1 week may result in some improvements in sleep. It is believed that *calcium* and *magnesium* can also serve as sedatives (sleep-inducing substances), and some people have found that supplementing their diets with these minerals has promoted improved sleep.

With all of the diet recommendations discussed here, it is important that you monitor your child's sleep to assess if and how these foods are affecting sleep. It is also important that your physician be included in any discussions concerning changes in diet, especially if you are using supplements.





## EXERCISE, ACTIVITY, AND SLEEP

Timing is everything, especially when it comes to exercise and sleep. If a person exercises too close to bedtime, he or she may have difficulty falling asleep. Engage in regular exercise earlier in the day, however, and you may find that sleep is even better. Why would the time of day matter when it comes to exercise? I described in Chapter 1 how our internal body temperature changes throughout the day and night and how a dip in temperature in the evening seems to be related to becoming drowsy, and a rise in temperature in the early morning is related to becoming more alert. Exercise or vigorous activity in general is important to this pattern because it can serve to raise our internal body temperature, therefore making us more alert. Such activity right before you want your child to sleep can be counterproductive—keeping him or her awake and alert rather than drowsy and sleepy. Fortunately, you can make exercise work *for* instead of *against* your child's sleep. Raising the body's temperature by exercise will cause a kind of temperature *catch up*, where the body compensates by subsequently lowering its temperature 4–6 hours later. If you time it right and have your child exercise 4–6 hours before bedtime, his or her body temperature will drop just at the time you want it to—in time for him or her to become drowsy for sleep.

What about exercise that occurs earlier in the day, more than 6 hours before bedtime? Unfortunately, such activity will not have a direct effect on sleep. However, it does appear that being fit in general is related to better sleep. Research suggests that “couch potatoes” are more likely to have trouble sleeping than those who engage in regular exercise.

It is recommended that the exercise you have your child attempt should be of the aerobic type in order to positively impact sleep. In other words, the child must raise his or her heartbeat such that there is heavy breathing for at least 20 minutes per day. Obviously, you should not start right into a hefty exercise plan if your child has not been active. Consult with your physician and start slowly. Injuries caused by doing too much too soon can be painful and can themselves disturb sleep.

Added caution needs to be taken for some people with special needs. For example, individuals with Down syndrome (a disorder that results from having an extra 21st chromosome and is accompanied by some level of cognitive impairment) often have cardiac problems and should be extremely careful when engaging in any exercise. Similarly, people with severe physical disabilities, such as those with cerebral

palsy, should also seek the advice of a physician to determine the type and duration of any exercise. Do not be discouraged if your child is not able to engage in vigorous exercise because of physical limitations. As I discuss next, any increase in activity may help him or her with sleep.

We often encounter people who are in school or who work where the activities they engage in each day are extremely boring. For example, it is all too common for people with an intellectual disability to be provided with the same repetitious tasks day in and day out. Similarly, many children with learning disabilities are routinely drilled on academic tasks to help them with their basic skills. Unfortunately, these boring tasks can contribute to sleep problems. Research with older adults, for example, suggests that, if they lead uneventful daily lives, they are more likely to have trouble falling asleep and staying asleep. It may be valuable to reexamine the types and flow of activities that your child engages in throughout the day and recommend some changes if necessary. One 17-year-old young man we worked with who had an intellectual disability spent his whole day sitting at the same table working. We suggested that he be allowed to get up from the table to get his own work (previously his teacher would get it for him) and that he get up to put it away. Even this small change seemed to make him more alert during the day and more tired at bedtime.

## Exercise and Activity Suggestions

- Try to establish a daily exercise regime for your child.
- Encourage your child to engage in aerobic exercise 4–6 hours before bedtime.
- Discourage your child from exercising or engaging in vigorous activity right before bedtime.
- Consult with a physician before starting any new exercise programs.
- Look for ways to decrease boredom and increase activity throughout the day.

## THE BED AND THE BEDROOM

Many of us use our bedroom as an office, a family gathering place, a dining room, an entertainment center, and a place to plan out our futures. And, for you, this may not be a problem. However, many



people come to connect their bed or bedroom with activities that interfere with sleeping. Both positive and negative associations with the bed can cause a person to have trouble falling asleep. At the beginning of this chapter, I discussed how Harry may have come to associate his bed with wrestling and roughhousing with his mother. It may have been very difficult for him to turn off these exciting times and fall asleep in the same place where, minutes before, he was so exhilarated. Other people work in bed and find it difficult to stop thinking their anxious thoughts and fall asleep. Because we often do not know if these types of associations are the problems that are causing sleep difficulties, we usually recommend that parents try to restrict the child's activities surrounding the bed to only sleeping. This technique is called *stimulus control*, meaning that the bedroom or the bed can trigger behavior that can help or hurt sleep. We try to turn around previously learned associations such as “bed = wrestling” to new associations that are more beneficial to sleep, “bed = sleep.”

Another implication of this association is if your child lies awake at night in bed for too long. Typically, you would expect a child to fall asleep within 15–20 minutes of putting his or her head on the pillow. However, sometimes children will either sit in bed before falling asleep or wake up in the middle of the night and worry about things that may have happened that day or what is coming up the next day. Children with an anxiety disorder, including some with the “Asperger’s type” of ASD, will perseverate in their minds and not be able to fall asleep (I discuss this issue in Chapter 12). Yet an immediate concern is that the child lies in bed for more than 20 minutes without sleeping. If this should occur, we recommend getting them out of bed and have them, perhaps, sit in a chair in the room. Once they seem sleepy, then they can go back to the bed. This is to avoid having the child connect worrying and the bed. This recommendation is also relevant if you have this difficulty. And, one more thing—do not look at your clock if you wake up at the wrong time! Many people do this and become concerned that they will not get enough sleep that night. This only increases your anxiety and interferes with falling back to sleep.

Sometimes there are practical limitations when trying to follow through on this approach. For example, in smaller homes where the bedroom may be the only place to play, we recommend that child play on the floor, restricting the bed to bedtime stories and sleep. We also work with people who live in one-room apartments and for whom the bed is a couch and the bedroom is literally the living room, dining

room, or so forth. In those cases, where it is impossible to keep the bed as only a place for sleep, we rely heavily on the constant and predictable bedtime routines we described at the beginning of this chapter to help the child associate the bed with sleep, at least at night.

Lastly, we often ask parents to “sleep an hour in their children’s beds.” We do not mean this literally but instead want parents to focus on things in the bedroom that might be interfering with their child’s sleep. Is the bedroom noisy? Can you hear conversations, the television, or a dishwasher in the next room? Any number of noises at bedtime can keep a light sleeper from falling asleep. It may be necessary for the family to be quieter at night, at least until the child is asleep. Other families have found that they can move their activities into another room that is not so close to their child’s bedroom and that this reduces the noise that can be heard. Light can be another problem. A too-bright hallway light, for example, may be interfering with sleep. On one occasion, we found that a child who was waking up too early in the morning did not have any window coverings in her bedroom, and the early morning light woke her up. Even something such as a too-cold or too-warm bedroom might be a problem for your child. Spend some time in your child’s bedroom at night and see if there are any common sense changes that can help the onset of sleep.

## CONCLUSION

This chapter is recommended for everyone whose child is having trouble sleeping. It began with a Good Sleep Habits Checklist that we recommend everyone consult before moving on to more specific techniques. These recommendations include many of the suggestions that sleep experts collectively refer to as *sleep hygiene*. Just as good physical hygiene helps us to be healthier physically, good sleep hygiene has been found to help people sleep better. The introduction of routines was highlighted first because it can be a powerful sleep technique. Other recommendations such as limiting certain foods and drinks have helped people who were unknowingly disrupting their own sleep.

It is important to point out that your child’s disturbed sleep is probably causing your own sleep to be disrupted. We often find that parents also have trouble sleeping and that the start of their troubles began when their child began having difficulty. Unfortunately, we also find that, even when we can help their child to sleep better,



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Strategies for Change

the parents' sleep continues to be disturbed. Recognizing this, I have made the recommendations in this book applicable to anyone who is having trouble with their sleep. It may be helpful, therefore, for you to complete the Good Sleep Habits Checklist for yourself to see if you can improve your own sleep as well.

Excerpted from Sleep Better!

A Guide to Improving Sleep for Children with Special Needs, Revised Edition  
by V. Mark Durand, Ph.D.

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