

BECOME A BABY- SLEEP EXPERT

...in 30 minutes!



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Contents

Introduction.....	4
<i>Chapter 1: Important Sleep Information</i>	5
1.1 Why do babies need so much sleep?.....	5
1.2 How much sleep is needed?	5
1.3 Are sleeping problems common?	6
1.4 Understanding why babies wake during the night	6
1.5 Understanding the stages of sleep	7
1.6 Crying it out.....	8
1.7 A word of caution regarding sleep-trainers	8
1.8 Sleep Maturity	8
<i>Chapter 2: Helping Baby Enjoy a Healthy Night’s Sleep.....</i>	9
2.1 Your baby’s internal clock	9
2.2 Helping to set your baby’s internal clock.....	10
2.3 Lullaby Babies.....	10
2.4 Sleep Associations.....	11
2.5 Establishing a routine	11
2.6 Naptimes.....	12
<i>Chapter 3: Quick Tricks to Help Baby Drift Off.....</i>	13
<i>Chapter 4: What to Check If Baby Wakes During the Night</i>	15
<i>Chapter 5: The Time to Start Saying ‘No’</i>	17
5.1 Options	17
5.2 Calorie Shifting	19
5.3 Saying ‘No’ for the First Time	20

Chapter 6: Safety Comes First.....	21
6.1 Sharing a bed (co-sleeping) or cot?	21
6.2 Sudden infant death syndrome (SIDS)	22
6.3 Baby Monitors	24
6.4 Colic	25
Chapter 7: Extra Sleep Advice for 12-18 Months.....	26
7.1 Separation Anxiety	26
7.2 One Step Forward.....	28
7.3 Safety Revisited.....	28
7.4 Combining Naps.....	29
Chapter 8: Conclusion.....	30
References.....	31

Introduction

New parents have usually had access to a huge wealth of literature and advice concerning their new arrival to the family. However, few first-time parents have had the time to wade through the mountain of information and decide what plan of action will be best for their situation. Furthermore, the available information is frequently contradictory. Couple this with the occasional scare story in the media, and parents are often left feeling confused and panicked!

I have spoken to many couples who have attended evening parenting classes and I am amazed to hear their concerns about how their classes only concentrated on the birth itself and on the time leading up to it. They were terrified that once the baby arrived, they would not have the slightest idea how to care for him or her properly!

The purpose of this e-book is to address one specific subject that confuses a lot of new parents: How safely to help baby (and ultimately themselves) get the right amount of sleep.

On first consideration, the fact that I am not a parent myself may cause some readers to worry that I am not fully qualified to write this guide. However, parents who write books such as this one tend to be very biased towards the techniques that have worked for their own children and they often dismiss the rest. Basically, they lose their objectivity. As no two babies are the same, this can be incredibly misleading for their readers.

As a Biology graduate and business owner, I have used my unique skill-set to analyse and assess the wealth of reputable books, articles and medical journals written around this subject and it is my goal to summarize this information and present the results in an objective, scientific, no-nonsense guide.

1 Important Sleep Information

It is ineffective and potentially dangerous to learn the techniques that can help your baby sleep more easily, without first learning about sleep in general and how and why it is essential to every baby.

1.1 Why do babies need so much sleep?

Babies have a great deal to learn in a very short space of time. During waking hours, there is too much going on for babies' brains to digest or reflect on the huge amount of information being received. During sleep the brain can organise and make sense of the vast array of experiences without distraction. Sleep is also a time for renewing the chemicals in the brain and the body, ready for another active day. (Hames 2002).

1.2 How much sleep is needed?

Parents are often concerned that their baby may not be sleeping enough, whilst others voice their concerns about their baby sleeping too much.

I think it may be useful for parents to know the amount of hours that the average baby sleeps at different ages. However, it is important to remember that there is a **huge variation** that exists from one baby to the next. Some newborn babies sleep 21 out of the 24 hours per day. Others only need as few as 8. The test to see if your baby is getting enough sleep is to examine if she is waking happy and alert. If so she is getting enough sleep. If she wakes and is irritable or tired, she may need to sleep longer. (Hames 2002).

Age	Daytime	Night-time
1 week	8	8 ½
4 weeks	6¾	8 ¾
3 months	5	10
6 months	4	10
9 months	2 ¾	11 ¼
12 months	2 ½	11 ½
2 years	1 ¼	11 ¾
3 years	1	11
4 years	-	11 ½
5 years	-	11

Figure 1. The Amount of Sleep the Average Baby Needs (Quine 1997)

1.3 Are sleeping problems common?

You'll probably be relieved to know that they are very common and a lot of parents are in the same boat. Between a fifth and a third of all families report they have some kind of sleeping problem during the pre-school years (Messer and Richards, 1993).

1.4 Understanding why babies wake during the night

It is important that you understand the reasons why newborn babies wake in the night. In the first few months they have many essential needs, yet their ability to communicate is extremely low. For example, their miniscule tummies digest milk extremely quickly and if the stimulus for hunger does not wake the baby, he will not get the level of nourishment needed at that vulnerable age (Sears 2006). Likewise, babies are still learning to regulate temperature and it's an important survival mechanism that they awaken if they are too cold or hot during the night. The same applies to many stimuli that also have the potential to wake the baby. Therefore, these mechanisms are not there just to annoy the parents, but to ensure the well-being of the baby! As you are next dragging yourself out of bed to tend to your baby, you should take comfort in the fact that his innate, built-in defence-mechanisms are evidently working just fine!

1.5 Understanding the stages of sleep

When an adult falls asleep, her higher brain functions decelerate which allows her to enter the phase known as deep sleep. During this time her body hardly moves, breathing is slow and regular, and her muscles become relaxed and loose. After around an hour and a half later and her brain becomes more active and she enters into a period called light sleep. It is during this time when she may slip into REM (rapid-eye-movement) sleep where most dreams occur. These deep/light cycles continue throughout the night, at around two hours intervals, so that the average adult spends around 6 hours in deep sleep and 2 in light sleep.

Babies need to be parented to sleep because, unlike adults, they only go into a deep sleep after an initial period of light sleep. Let's see how many of you can relate to this: Imagine you're performing your bedtime ritual with your baby: you're rocking, walking, nursing etc until she falls asleep in your arms. Her eyes are completely closed, her eyelids may be fluttering and she may be twitching or showing momentary smiles (called sleep grins). Just as you think it's safe to place your baby in her crib and sneak away, she wakes and starts crying! Why does this happen? It's because she wasn't properly asleep and only in a state of light sleep. Next time you attempt your bedtime ritual, carry on past this first stage of sleep (usually takes around 20 minutes). Wait until the twitching and smiling cease, the breathing becomes more regular and the muscles relax so that her limbs dangle weightlessly. These are the tell-tale signs that the baby is in the deep stage of sleep and your chances of being able to put her down and sneak away successfully are dramatically improved (Sears 2006).

Like adults, babies' sleep cycles continually change from light to deep throughout the night. However, their cycles are significantly shorter than those of adults. They will enter into a period of light sleep every hour or so. During this time the baby is prone to awakening easily if an uncomfortable stimulus occurs, such as hunger (Sears 2006).

Some new parents will often spend time just watching their baby sleep. If you do this, you may notice the tell tale signs that she is about to awaken. You may be able to get your baby through this period of light sleep, without waking, if you place your hand on your baby's tummy, whisper a comforting word or play her favourite lullaby quietly. Sometimes letting baby know that you're there will comfort her enough to enter back into deep sleep without waking. Fathers may have more luck with this technique if the baby is breast fed because often the baby will pick up on the scent of breast milk and will automatically awaken for a feed. In a chapter 2.3 we will discuss the advantages of playing comforting music in more detail.

1.6 Crying it out

There is a theory that advises you not to respond to a baby's cries during the night because it will teach him to comfort himself back to sleep and therefore, he won't bother you as much. I have to say, this is the worst advice I have ever come across. A baby in the early stage of growth is very vulnerable and it is the parents' biological duty to satisfy every need of their offspring. Letting him 'cry it out' can be very psychologically and physically damaging to the child in the early stages of development. There does come a point in development when baby will reach the stage where he does need to learn to comfort himself on his own and we will discuss this in chapter 5. However, as far as the right and safest way to look after your newborn is concerned, give him everything he needs, and yes that obviously means some sleepless nights in the beginning.

1.7 A word of caution regarding sleep-trainers

There is evidence to suggest that sleep-trainers may be a dangerous solution to a frequently waking baby. Encouraging a baby to sleep too deeply, too long, too soon, may interfere with the natural developmental and survival mechanisms that the baby is armed with. Sleep researchers have found that blood flow to the brain is almost doubled during light sleep and believe this is indicative of a more active brain during these periods. They believe important development takes place during light sleep. Training a baby to spend more time in a deeper sleep may therefore be damaging to the baby (Sears 2006).

1.8 Sleep Maturity

During the first three months of development, tiny babies rarely sleep for more than four hours without requiring feeding. At around three to six months, the majority of babies start to settle. They are awake for longer periods during the day and some with lucky parents may sleep five-hour stretches at night! The time they spend in deep sleep starts to lengthen and the time spent in light sleep shortens (Ficca et al, 2000). This means babies are able to enter deep sleep more quickly. This is called sleep maturity. (Sears, 2005).

The time your baby takes to reach sleep maturity may vary and even when she does reach it, she may still wake up regularly. This is because by the time she is old enough to reach sleep maturity (usually towards the end of the first year), uncomfortable and painful stimuli present themselves, such as colds and teething pain. Furthermore, separation anxiety develops at around this age which causes sleeping problems. Babies also start reaching developmental milestones, such as sitting, crawling, and walking which causes them to run through their newly acquired skills in their sleep (Lavin, Glaser 2007).

2 Helping Baby Enjoy a Healthy Night's sleep

I hope by now you understand why, how and when your baby needs to sleep. This next part of the guide will discuss the theories and techniques for helping you and your baby get a longer and safer night's sleep, focussing on the 0-12 month period primarily

One fact that is very clear from all the research that I have studied is that there is no, 'one size fits all' technique to helping a baby get to sleep. I will explain the known reputable techniques and the pros and cons of each. It is your job to find out which one 'fits' your baby. If one doesn't work, try the next one until you find a technique, or develop a hybrid that works for your unique situation. You will also find that as your baby goes through the different developmental stages, this technique will need reviewing and updating.

2.1 Your baby's internal clock

The 'circadian rhythm' is the 24 hour internal clock that controls various biological processes, including sleep, wakefulness, and digestive and hormonal activity. The natural signal for the circadian pattern is the change from darkness to light (Talaris Research Institute 2007).

Unfortunately, a newborn baby has no idea that people are supposed to sleep when it's dark and his circadian rhythm is still developing (McGraw, Hoffman, Harker, & Herman, 1999). In the first weeks and months therefore, it is unreasonable to expect him to sleep through the night.

After a few months however, babies start to synchronize sleeping and waking with daily cycles of darkness and light (Louis, Cannard, Bastuji, & Challamel, 1997).

By the time he is six months, your baby will probably be synchronizing his main sleep times with the cycles of darkness and light. He will be sleeping for longer hours at night and probably wake up fewer times (Anders et al., 1999). He will also be much better at soothing himself when he wakes. At six months he will be much more likely to be able to go back to sleep on his own, without your help (Goodlin-Jones et al., 2001).

2.2 Helping to set your baby's internal clock

There are some simple techniques for helping your baby synchronize her sleeping patterns with the adult way of doing things and therefore she will safely reach the stage where she sleeps through the night more quickly.

During the day, open the windows and let the light fill the rooms. Generate lots of hustle and bustle and try to get outdoors for some playtime. At night do exactly the opposite as sleep-time approaches. Start turning down the lights, be as quiet as possible, turn off the television and reduce talking to absolute minimum. Feed, cuddle, massage and hold baby as quietly as possible. You can also quietly play her favourite lullaby just before bedtime. Baby will soon learn to associate this with the process of falling asleep (Lavin, Glaser 2007).

These straightforward procedures remove distractions and so facilitate the baby's awareness of the ultimate clock-setters, your local sunrise and sunset. With time, the sun's rhythm will trigger chemical reactions that reset your baby's internal clock (Lavin, Glaser 2007).

2.3 Lullaby-Babies

Parents have long been aware of the soothing effects that lullabies can have on babies. However, research has been conducted that has not only proved this scientifically but has also shown the range of positive physical and psychological advantages that lullabies can have on babies. One study that was published in the *International Journal of Arts Medicine* showed that playing lullabies to babies can reduce their heart rates, increase oxygen saturation and reduce stress behaviours.

After you have gone through your baby's pre-bed routine every night, you may want to finish this off by playing a calming lullaby on the CD player. My expertise in the baby-sleep field stems from owning the company, 'Lullaby-Babies.' As you may be aware, we have used the known scientific theories and worked with an award-winning songwriter to develop an original lullaby for incorporation into the pre-bed routine. For added sweetness, each lullaby is personalised with the baby's name in the chorus. Further information can be found at: <http://www.lullaby-babies.co.uk>.

2.4 Sleep Associations

Your baby is incredibly adaptable and can learn effectively through association. He will start to associate the process of falling asleep with the things that he has been used to experiencing immediately prior to bed-time. By making these things consistent and predictable, their very presence will signify to your baby that it's time to sleep (Hames 2002).

2.5 Establishing a routine

Babies learn best through routine and this is the age when baby is ready to get into the habit of eating and sleeping according to a fairly consistent timetable. The best way to accomplish the challenge of getting your baby to go to bed at a regular time is to follow a well organised day with a consistent bedtime routine. A bedtime routine can include all or some of the following: bath, feed, story, massage, cuddle, lullaby. It culminates with the baby in her place for sleep on her own or with you. A little trial and error is needed to see which techniques relax your baby. In time you will develop a unique bedtime ritual of your own but you should follow this advice:

- Set a bedtime and try and keep it as consistent as possible. Bedtimes can vary from as early as 7pm to as late as 9pm. Your lifestyle and work commitments may determine this for you. The important factor is consistency. Don't set a late bedtime thinking baby will get exhausted and sleep right through. This is bad news and usually doesn't work. She's far more likely just to get overtired.
- Try and make the elements of the routine come in the same order: babies love predictability and will be much calmer if there are no surprises.
- Also try and make sure it's practical. There's not much point in having a routine that's easy to follow at times and difficult at others.
- Make sure it's possible to do all the things you plan in the time allocated. Start setting the mood for bedtime 30 to 45 minutes prior to putting your baby down for the night. Dim the lights, put on a relaxing lullaby and lull the mood. Many experts now recommend a 20 minute book sharing period, even with very young babies. You may want to think about starting your routine a little earlier than you planned.
- Try and make sure you won't be disturbed during this period. Perhaps consider taking the phone off the hook etc. so you can give your baby your undivided attention and his routine won't be interrupted.
- Change your baby into comfortable pyjamas with no frills, buttons or tags that can potentially cause itching or poking.

- Put your baby to sleep in the same place every time. It is best to have your baby go to sleep in the same place, including for naps. This way, when she is put down in her crib, she will understand that it is time to go to sleep. If she is sleeping in a variety of different places, she could get confused. Obviously, this one is difficult for parents who work, and put their babies in day care.
- As many components to the pre-bed ritual as possible, should be conducted in the baby's room. If every night you go into her room to get ready for bed, she will understand that it's time to go to sleep. Her bedroom should be for sleeping only. The last thing you want is for your baby to associate her bedroom with play time.
- Literally tell your baby every night when it's time for bed-time. She understands more than you think and she will start to associate the phrase with sleep-time.
- Many babies like to hear soft music as they are drifting off. Musical patterns are powerfully pleasing to the brain and can mask household sounds that disturb your baby's sleep. You should play the same lullaby each night so that baby associates this with sleep and will start to drift off upon hearing it.

Obviously there will be times when the routine won't be possible. That's completely fine but you should try and get back to normality as soon as possible for the routine to be effective (Lavin, Glaser 2007).

2.6 Naptimes

Naps usually take place in the middle of the morning or the middle of the afternoon. You may use the same, consistent techniques for helping baby nap as you learned for night-sleeping. Here are some additional tips:

- Without disrupting your life too much, try and plan nap times for roughly the same time each day.
 - Plan nap times for about half an hour after lunch or a snack so that baby is not hungry and therefore, will be able to sleep better.
 - If baby is getting tired, make naptime a bit earlier or you run the risk of him getting overtired.
 - Time the afternoon nap so that he has enough time to get tired enough to sleep again at night.
 - Put on your goodnight lullaby quietly in the background and try to keep household noise to a minimum.
 - Think about investing in blackout blinds as babies sleep better in a dark room and it helps with the association that dark equals sleep (Lavin, Glaser 2007).
-

3 Quick Tricks To Help Baby Drift Off

This section describes the tried and tested tricks that parents use to help baby drop off to sleep. Some can be incorporated into a consistent, nightly pre-bed ritual but others should be saved for emergencies. Experiment and see which works for your baby.

- **Nursing.** During the first year it's very normal and developmentally appropriate for babies to be nursed to sleep. Breast feed or bottle feed her until she drifts off naturally.
- **Swaddling.** This is a traditional technique for making a baby feel secure. To swaddle your baby, spread a cotton cot sheet out flat, with one corner folded over a little. Lay your baby face up on the sheet with her neck resting against the fold. Wrap the left corner of the sheet over her body and tuck it beneath her. Bring the bottom corner over her feet, and then wrap the right corner around her, leaving only her head and neck exposed. Don't cover your baby's face with the sheet, since that could cause her to overheat or suffocate. Beware of overheating your baby; the aim is to make her feel secure rather than to keep her warm. Avoid using a blanket for this and make sure you don't wrap your baby too tightly, or his circulation could be impaired.

Swaddling creates a slight pressure around your baby's body that gives most newborns a sense of security because it mirrors the pressure they would have felt in the uterus. For some babies it becomes the trigger for sleep, but it can irritate others. You should stop swaddling your baby once she is about a month old because after that it can interfere with mobility and development. When your baby begins to kick off the covers, it's a sign she no longer appreciates being bundled snugly (Bates et.al.. 2007).

- **Try a dummy.** This is a great comforter to baby and she will often be able to fall asleep more quickly with one. It has been shown to be completely safe and there is evidence to suggest it even lowers the risk of SIDS. The obvious disadvantage is that if the dummy falls out of baby's mouth, you will be woken each and every time to retrieve it!
- **Fathering down.** Just before placing the baby into bed, the father should cradle the baby in such a way that the baby's head rests on the father's neck. The father should then talk gently to the child. Because the male's voice is much deeper than the female's, babies are often more soothed by it, and will

fall asleep more easily after being exposed to it for some time. Once baby is asleep, ease the sleeping baby into his bed and sneak away. Obviously, if dad is not around to perform this technique regularly, move on to the next one (technique I mean!)

- **Rocking or walking down.** Try rocking baby to sleep in a bedside rocking chair, or walk with baby, patting her back with a lullaby playing.
- **Wearing down.** Works well if you have an active child that has trouble winding down at night. Place your baby in a baby sling and wear her around the house for a half-hour or so before the designated bedtime. When she reaches the deep stage of sleep, ease her out of the sling and onto her bed.
- **Last resort:** Place your baby in a car seat and drive around the block until she falls asleep. This has a high success rate but its impracticality means that it should be saved for the times when you're getting desperate and really need some sleep. If baby is in a deep sleep when you return home, you may safely ease her out of the car seat and onto her bed (Lavin, Glaser 2007).

Remember, babies will associate falling asleep with the sights, sounds and experiences of the pre-bed ritual. Routine is the key to a consistent sleeping pattern and it's obviously impractical to employ all of the above techniques every night. Therefore, start with some of these more active techniques (if needed) and then slowly ease baby out of them and develop a consistent and practical pre-bed ritual.

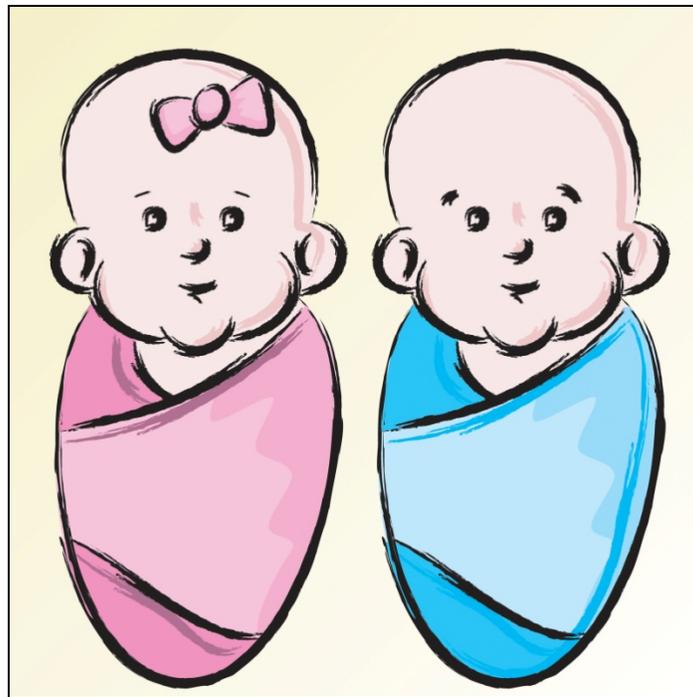


Figure 2. Swaddled Babies

4 What to Check if Baby Wakes During the Night

Here are some common things to check when baby wakes during the night.

-
- **Nappy.** Does he need a change?
 - **Appetite.** Does he genuinely need a feed? If so feed him. (Depending on what developmental stage he's at, this may be merely an attention-seeking tactic so be careful not to fall for it or you'll make the problem worse).
 - **Clothing.** Check his clothes for areas that may be causing discomfort- tags, button etc. Are the clothes 100 % cotton? If not, he may be sensitive or allergic to the synthetic fibres.
 - **Sleep Associations.** Are the key things he associates with sleep present to help him drift back quickly? If you have worked a lullaby into the pre-bed ritual, putting it on quietly (possibly on repeat) may do the trick.
 - **Illness.** Does he have a high temperature, look congested or unwell? If you suspect it could be serious call your doctor straight away. If he's scratching check to see if he has an insect bite or similar. Does he have nappy rash? If so petroleum jelly is the answer.
 - **Gas.** Rocking and giggling can help baby pass wind if needed. Employ your favourite burping technique after feeding to reduce gases building up.
 - **Routine.** Was his pre-bed ritual and lights out time consistent with other nights? Were his daily activities unusual? - nap times, snack times etc. If so it may have thrown his sleep patterns off a bit- comfort him and try and get back to the routine the next day.
 - **Milestones.** Has he reached any developmental milestones recently, such as sitting, crawling, walking, talking, teething etc? These go hand in hand with a few sleepless nights I'm afraid! Teething problems can be strongly suspected by the appearance of a wet bed sheet under baby's head, a drool rash on the cheeks and chin, swollen and tender gums, and a slight fever. Consult your doctor or pharmacist to find the right medication to ease the pain.
 - **Separation Anxiety.** If this is a suspected please see chapter 7.1 for how to help.
 - **Temperature.** Is he too hot or cold? Be careful not to overdress him and see figure 4 for the right temperatures.

- **Dressed for sleep.** In the early months, many babies like to "sleep tight," securely swaddled in a cotton baby blanket. Older infants like to sleep "loose," and may sleep longer stretches with loose coverings that allow them more freedom of movement.
- **Distractions.** Is his room too noisy or too light? Block out disturbing backing noise with a quiet lullaby on repeat. Purchase darkening blinds to shut out the light which may be awakening him. This may also lead to an extra hour of sleep in the morning.
- **Blocked nose.** In the early months, babies need clear nasal passages to breathe. Later they can alternatively breathe through their mouth if their nose is blocked. Reduce the amount of problem-causing articles from baby's room as these can cause stuffiness (cigarette smoke, baby powder, paint fumes, hair spray, animal dander, plants, clothing, stuffed animals, feather pillows and fuzzy toys that collect dust.) If your baby is particularly allergy-prone, a HEPA-type air filter will help. Consider buying a salt-water nasal dropper and give baby a few drops if he has a stuffy nose. Consult your doctor or pharmacist first.

(Lavin, Glaser 2007).

5 The Time to Start Saying, 'No'

After your baby reaches a certain age, you should begin to think about reducing the amount of night-time demands that you instantly rush to satisfy.

5.1 Options

After reaching the four month mark, most babies are physically prepared to sleep through the entire night. They don't really need middle of the night feeding anymore and most have acquired the ability to comfort themselves back to sleep if they do wake up. Therefore, if baby is still waking up frequently throughout the night it's probably because you are still jumping out of bed at her first cry, to give her a feed and a cuddle. She's learned that every time she cries, her favourite person and her favourite meal are by her side in seconds. Many babies are obviously not going to give this arrangement up too easily!

At this stage, you have a decision to make which will be based on your situation, your lifestyle, work schedule and sanity. Either option is perfectly fine but it's essential that you stick to your decision. Otherwise you may confuse baby and lead her to test you frequently to try and figure out what game you're playing. To help you decide, here are the pros and cons of each:

Options	Pros	Cons
1. You can keep getting up with every call for a few more weeks or months	<p>You can't spoil your baby or set irreversible patterns at this stage.</p> <p>Your baby may possibly start sleeping through the night of her own accord.</p>	Continued tiredness for you which can increase your stress-levels and lower your general well-being. Happy babies need happy parents.
2. You can start to use the technique I will discuss next which will gradually but firmly ease baby into an all-night sleeping pattern.	<p>Works for nearly all babies over 4 months.</p> <p>More sleep for you and your baby.</p> <p>Less traumatic than suddenly ceasing to respond to her cries all together.</p>	Can still be uncomfortable for parents used to immediately running to the rescue after every cry.

Figure 3. Your sleeping options

As previously described, most babies are physically ready to sleep through the night when they reach four months old. Some parents will start taking active steps to help baby sleep through the night at this stage. This is perfectly fine, but for most parents, the time when they feel comfortable enough to start setting limits for night-waking baby comes between the age of 6 and 12 months. This is a safe strategy as it almost guarantees that your baby is physically ready for the change (Lavin, Glaser 2007).

If you decide you are eager to end the sleepless nights you can begin to safely employ the techniques I will now discuss.

Be warned however, babies who were born early, are ill or are only able to eat a small amount at a single feeding, may still have legitimate night-time feeding needs. In these cases you may want to leave an extra few weeks or months before trying the following technique. If you are in any doubt, first check with your health care professional.

5.2 Calorie Shifting

If baby is used to a 1.00 am feeding, his stomach will hunger for food at that time every night. One of the best techniques for helping your baby to sleep through the night is to reset his 'stomach clock.' The aim is to reduce baby's night time food intake without letting him go hungry. Regardless of the age of the baby, he will generally take in the same amount of calories per 24 hours. If you gradually reduce the night time feeding, baby will just eat more during the day to make it up. This is called calorie shifting.

To start reducing the volume of nightly feeds your baby needs you can start trying some simple techniques for when baby awakens during the night. The techniques will vary according to whether you're breast or bottle feeding. If you are breast feeding and he wakes up during the night:

- Rub his back or play his 'goodnight lullaby' to see if he can be soothed back to sleep without a feed.
- Try sending in someone besides Mum to tend to baby. The scent of breast milk can activate the baby's desire to be fed.
- If you're happy to use bottles, try giving baby a bottle of breast milk for night feedings. Then start gradually diluting them each night until they're only water (see below). Because of the reason mentioned above, someone apart from Mum may have better luck at trying this. Nipple confusion (difficulty moving back to breastfeeding after switching to the bottle) is not an issue at this age.
- If you're not happy using bottles, gradually start increasing the time it takes you to respond to his cries. He may learn to comfort himself back to sleep without your help. By this stage you will probably be able to tell whether your baby's cry is because of a *want* or a *need*. Obviously, you should continue to respond instantly when you think your baby actually needs something.

If bottle feeding, calorie shifting can be accomplished using the following technique:

- Choose your least favourite night feeding time and make the formula for that feeding $\frac{3}{4}$ of the strength. If baby is satisfied with this bottle, gradually decrease the strength by $\frac{1}{8}^{\text{th}}$ each night until you are giving him only water. Repeat the process for all the night-time feedings and by the end of the process, your baby won't be hungry at all during the night and he will be taking in more calories during the day to compensate (Lavin, Glaser 2007).

5.3 Saying no for the first time

Once you reach this stage you can be pretty certain that if your baby is still waking you up regularly during the night, the major reason is just because she *wants* to see your face. An important role of every parent is to help their child understand the difference between *needs* and *wants*. Although you will instinctively want to rush to every cry it's time to start setting yourself some limits. You need to understand that by changing the pattern and not running instantly to every call, you cannot damage or traumatise your child in the slightest. Furthermore, it's important developmentally to allow the tot to start solving problems on her own.

To start to gradually change the pattern you should begin by waiting a couple of minutes when you hear your baby start to cry. She might be able to soothe herself back to sleep, waking for only a few seconds. Rushing in and picking her up will obviously awaken her completely.

When you've prepared yourself to start drawing the line, set a bed-time and a time to get up and don't go in to baby's room in-between. The obvious exception to this is if the cry sounds different to normal. In this case a visit is very much in order to check she isn't sick, stuck or soaking wet. If all is fine put her back in her crib, rub her back and tell her in a calm, soothing voice that you're there. Generally, baby will only need 2-4 of these nights to change her expectations that you come running every time she cries. She will give in the crying game and sleep the whole night (Sears 2005).

6 Safety Comes First

Above all else, the baby's safety is obviously every parent's major concern. With irresponsible scare stories littering the media and biased and contradictory 'experts' opinions everywhere, I feel it is important that I give you my objective report on the scientific facts surrounding the major issues. These often get 'overlooked' when trying to sell newspapers.

6.1 *Sharing a bed (co-sleeping) or cot?*

There is great controversy regarding the best place for your new baby to sleep. I have examined a wealth of research and literature published on the subject and my opinion is that, in general, the safest place the baby can sleep (for the first six months) is in a cot in the parent's room. My opinion is shared by The Foundation for the Study of Infant Deaths (FSID) who launched a nationwide campaign to try and get this message home. They have recently launched an attack on the Channel Four programme, "Bringing up the Baby" because someone on the show advised that the baby should have his own room from day one.

Research has proved that infants who sleep in their own room in the first six months are twice as likely to die from SIDS (formerly called cot death) than those who share their parents' bedroom. (FSID's Editorial Team, 2007). I strongly advise you therefore to have baby sleeping in your room for the first six months.

However, the choice of whether you want to share a bed with your baby or put him in a cot next to the bed is ultimately for you to decide on your own. The reason I stated that a cot in the parents' room is generally the safest place to put baby to sleep is because there are certain medically-agreed, risk factors that can make co-sleeping much more dangerous than cot sleeping. Experts agree that you should never share a bed with your baby if:

- The baby is under three months old
- The baby was premature or less than 2.5kg
- You or your partner are smokers (even if you don't smoke at home)
- You have been drinking alcohol or have taken medications that make you drowsy.
- You are very tired.

If the above rules are followed I have not found conclusive evidence to recommend cot-sleeping over sharing a bed or vice-versa. The fact that the research is contradictory tells us that there is no hard and fast, right or wrong answer and the unfortunate truth is that tragic accidents can happen in any scenario. Fortunately, these accidents are very rare.

To help you make an informed decision, I will discuss the pros and cons of co-sleeping.

Not only is it far more convenient for breast-feeding mothers but research has shown that babies and mothers sleep much better when they share a bed, with solo baby sleepers being shown to spend four times longer crying each night (McKenna, J., et al 1994). It has also been shown that bed sharing babies have more stable temperatures (C. Richard et al 1996), regular heart rhythms, and fewer long pauses in breathing compared to babies who sleep alone (T. Field 1995). This means baby sleeps physiologically safer.

The results from several studies have suggested that co-sleeping babies grow up with higher self-esteem, less anxiety, become independent sooner, are better behaved in school (P. Heron 1994) and are more comfortable with affection (M. Crawford 1994). They also have been shown to have fewer psychiatric problems (J. F. Forbes et al 1992).

There has actually been research to show that co-sleeping is safer than crib sleeping, despite the media scare stories (Blair et al 1999). The Consumer Product Safety Commission published data that described infant fatalities in adult beds. This data, however, showed more than 3 times as many crib related infant fatalities compared to adult bed accidents (D. A. Drago and A. L. Dannenberg 1999). Another recent large study concluded that bed sharing did NOT increase the risk of SIDS, unless the mum was a smoker or abused alcohol (R. G. Carpenter et al., 2004).

However, tragic accidents, although rare, do occur and you can't ignore the possibility that:

- you might roll over in your sleep and suffocate your baby
- your baby could get caught between the wall and the bed
- your baby could roll out of your bed and be injured

In the absence of conclusive evidence it's up to you to decide what works best for your situation. The important thing for you to do is to make your informed decision and then stick by it. Spending hours fretting that you may have made the wrong decision and placed your baby at an elevated risk is only damaging to yourself and your family.

Whichever sleeping arrangement you choose, there are steps you can take to make it as safe as possible.

6.2 Sudden Infant Death Syndrome (SIDS)

Thankfully, the rates of SIDS are falling. In 1991 SIDS hit 1 in 1000 infants. Nowadays the figure is closer to 1 in 2000. After close examination of the research I have found that there are some significant factors which affect the chances of a baby dying of SIDS.

Most cases of SIDS (around 75%) happen when the infant is less than four months old. After this period the risk falls dramatically. Premature babies are at a higher risk with the risk rising according to the degree of prematurity (Lavin, Glaser 2007).

Babies and infants exposed to cigarette smoke have been found to have a higher risk of SIDS, with some studies indicating the risk is five times greater than babies not exposed to the cigarette smoke. So in which ways can you dramatically decrease your child's risk of SIDS?

1. **The golden rule is to put your baby to sleep on his back.** This has been the most influential discovery in reducing the number of deaths from SIDS. Ensure you **always** follow it. There has been concern by some parents who followed this rule but awoke to find their baby had rolled herself over onto her side or her front. Doctors generally agree that this type of occurrence does not warrant an elevated cause for concern. If the baby is able to roll herself over, the consensus is that she also has the mobility to get out of an uncomfortable or stressful position should one occur.
2. **Ensure the baby's home is smoke free.** Even smokers who light up outside of the house increase the risk of SIDS. Kicking the habit is obviously the safest thing you can do but if you can't do this, ensure that smoke is banned from the house and that no smoker shares a bed with the baby. Also do not smoke during pregnancy.
3. **Ensure baby has the right bedding.** Never let your baby sleep with a pillow. Just use a firm mattress.
4. **Don't fall asleep with your baby while sitting or lying on the sofa.**
5. **Place the baby's feet at the bottom of the cot.** This prevents wriggling down under the covers.
6. **Sucking a dummy may reduce the risk.** It's safe and studies have shown it to reduce the risk of SIDS, although experts are still examining the research before making a recommendation.
7. **Don't overheat the baby's room.** Ensuring the temperature is comfortable but not too warm

Room temperature	Amount of bedding
12°C	sheet plus four or more layers of blankets
14°C	sheet plus three or four layers of blankets
16°C	sheet plus three layers of blankets
18°C	sheet plus two layers of blankets
20°C	sheet plus one or two layers of blankets
22°C	sheet plus one layer of blankets or sheet only
24°C	sheet only

Source: Department of Health www.doh.gov.uk
Table 1. Bedding guidelines for babies wearing a nappy, vest and babygro.

Figure 4. Correct Temperatures

- Try to keep room temperature between 16 and 20°C – the ideal temperature is 18°C. Get a thermometer to check the temperature.
- Use the right amount of bedding for the temperature of the room (see Table 1). When you check on your baby, if your baby is sweating or their tummy feels hot, take off some of the bedding. It's normal for babies to have cool hands and feet.
- Don't let your baby sleep with a hot water bottle, an electric blanket, next to a radiator, heater or fire or in direct sunshine.
- Don't use duvets, quilts or pillows if your baby is less than one year old.
- Don't put too many clothes on your baby.
- Take off the baby's outdoor clothes as soon as you get inside.

(BUPA's Health Information Team, 2006)

6.3 Baby monitors

Baby breathing monitors are available that are designed to alert you if they can't detect breathing for more than 20 seconds. A monitor should only be used under the supervision of a pediatrician or other doctor. Although common, there is no evidence that these monitors prevent SIDS, and many doctors believe they provide a false sense of security. (BUPA's Health Information Team, 2006)

6.4 Colic

This is when an infant is healthy and well fed yet cries in excess of three hours a day for more than three days a week. It is a harmless condition but is obviously very upsetting for parents and carers. It affects around 20% of babies and usually appears around 2 -4 weeks of age and can last for three months. There is much speculation around the causes, although experts agree there is not one universal cause that affects all babies. (BUPA health information sheet 2003).

However, one recent study found that many colicky babies had inflamed intestines, caused by food allergies. When the problem food was eliminated from the diet, the baby recovered almost immediately. For breastfeeding mums, this means also cutting the problem foods from her diet. The usual culprits are proteins from cow's milk, soya or other troublesome foods. Mums can alter their diet and reintroduce foods one at a time to see if the problem food can be found. If you bottle-feed you may want to try a new formula (Lavin, Glaser, 2007).

If you suspect your baby may have a food allergy, you can work with your paediatrician to find the foods causing the reaction and eliminate them (Lavin, Glaser, 2007).

If your baby seems to have a lot of wind, make sure he is burped frequently. Babies who bottle feed may swallow air from the bottle. This can be reduced by feeding the baby in a different position or by trying a bottle that has been specially designed to reduce the amount of air swallowed.

To soothe babies with colic, the following techniques may be helpful:

- carry the baby in a front sling or back pack
- wrap baby snugly in a blanket (this is called swaddling)
- keep the baby moving in a baby swing
- place him near continuous noise or vibrations from household appliances like the dishwasher, vacuum cleaner or washer-dryer
- take him for a car ride or a walk outside
- give him a dummy to suck on
- give him tummy or back rubs
- take a shower together - the warm water may be comforting

(Lavin, Glaser, 2007).

Medicines are not used to treat colic. However, medicines may help to relieve abdominal symptoms. It may be worth trying "colic drops" or "gripe water", which are available without a prescription. A medicine called dimeticone (eg Infacol) is available to relieve trapped wind. Consult your doctor or the pharmacist first (BUPA's Health Information Team. 2003).

7 Extra Sleep Advice for 12-18 Months

Congratulations, by now you should be enjoying a few good nights of sleep due to your hard work as you lovingly coached your little one through the difficult challenge of getting to and staying asleep during the night without needing feeding or parenting. It will come as a great comfort to you then to know that the sleepless nights that are sure to follow the next stage of baby's development are down to an entirely different set of causes! .

7.1 Separation Anxiety

As we discussed earlier, one of the largest causes of sleepless nights in this stage of the child's development is the reaching of developmental milestones. Separation anxiety is another big culprit. The good news is these are only temporary and there are some very effective and safe techniques to help you out.

Separation anxiety is a perfectly normal stage in a child's development and can start anytime from at around 12 -20 months. Baby's increased awareness causes her to realise that you may leave her at anytime. This shows she has mastered skills such as recognising the difference between family and strangers, knowing how essential you are to her life and anticipating the feeling of loneliness that will follow from your departure. Unfortunately, she cannot comprehend that the departure is only temporary so it causes her great distress and panic that you might not return. Separation anxiety gradually diminishes as the child realises that you come back each time. However, during the condition, it obviously presents a large problem at bed-time.

A great comforter to a child with separation anxiety is routine. The consistent bedtime rituals you established in the latter half of your child's first year become incredibly useful once more. If you didn't establish any bedtime rituals then now is a great time to start. Although predictability is paramount, you want your bedtime rituals to be moulded towards your child's development. The minor subtleties of the rituals such as the stories

you read her, the music you play and the pre-bed snack should change with age but if you have a consistent routine, tweaking these details won't affect her.

As soon as you notice the first signs of separation anxiety, the bed-time rituals should come back into play and strictly adhered to once more. However, now the child is a little older we can make some improvements to the ritual to ease the anxiety:

- Talk to her more. Try to use short, clear sentences to explain that it's approaching bed-time. Use the same sentences every night because she will be comforted by the repetition. For example, you might exaggerate a yawn and say: "You must be getting very tired- it's almost time for bed!" You'd be surprised to know how much she understands verbally.
- Try to keep the bedtime consistent. There may be a strong temptation to delay the bedtime on various nights so that a partner can return home from work and spend some quality time with baby. However, this will only exaggerate the problem and should be avoided wherever possible- a solution would be to try and make some quality time in the morning.
- Now that baby is passed the one year mark it is safe for her to take a comforting teddy or security blanket to bed with her. Include this item in the bedtime ritual so that when the time comes for you to leave for the night, the feeling of being left all alone will be bridged by the teddy or blanket. It may sound strange but rubbing the item on your face will leave a strong scent of you with baby which can be very comforting during the separation anxiety stage.

As adults we can relate to stressful experiences during the day causing sleep problems at night. This is the same with tots. Therefore try to keep the days as predictable as possible and try to reduce the daytime stress during this stage. For a tot experiencing separation anxiety, thrusting her into the arms of strangers and even some relatives can easily cause a lot of stress. Instead let your child decide how sociable she will be at this stage.

Also use the following tips during the day:

- Keep naptimes at consistent times of day and prepare for them in the routine way with a lullaby, dimming of lights, a cuddle etc.
- If you can you should probably avoid introducing a new babysitter at this stage in the tot's development.
- At the times when you do need to leave your tot, keep things breezy. Smile, kiss her on the cheek and say in a cheerful voice: "Bye bye, I shall see you soon" and don't reveal that you're anxious about the departure as well!
- Try to minimise the time you're away as much as possible, avoiding business trips or weekends away at this stage in the baby's life. Baby's concept of time is still very limited and this time apart may seem like a life time which will only exacerbate the sleepless nights.
- If practical, consider holding off pre-school until your tot's verbal skills and ability to understand that you do come back, helps them deal with the scary

new situation much more easily. Children under three will often react strongly to being separated from their parent or guardian, but if pre-school is necessary, a child over two can make the transition with only short-lived protest.

(Lavin, Glaser, 2007)

7.2 *One step forward...*

When setbacks occur in your child's sleep routine, you may need to go back to basics with him. Re-introduce the consistency of the bedtime rituals and do the following:

- If your child kicks up a fuss as you leave the room, say calmly and cheerfully: "I love you. It's bedtime. I will see you in the morning." Then smile and leave the room.
- Get ready for your baby to cry from 30 to 60 minutes but remember this is a *want* not a *need*. Don't give in to his demands or you will only reinforce his confidence in this technique's effectiveness and you'll increase the problem.
- In the middle of the night, analyse the cries and decide honestly, if you think he's really in *need* or if he only *wants* attention. If you're sure it's just the latter, be strong and wait him out. This will give him the chance to cry it out and learn to comfort himself back to sleep. If you must go back in the room, give him a pat on the head and a soothing sentence but do not pick him up or this may signal playtime!

Once you've taken the above measures and tackled separation anxiety your nights should be peaceful once more. The hard part is over and all that remains are a few little adjustments to reflect the physical and mental development of your child.

(Lavin, Glaser, 2007)

7.3 *Safety revisited*

On a safety front, you should lower the crib mattress when baby starts standing. Her head should come just above the crib rail when she's standing. At this height she won't be able to pull herself over the top rail which could cause injury. Also if your crib has bumpers at this stage they should be removed as she could use them to climb up and over.

7.4 Combining Naps

In terms of naps, most toddlers during their second year will start to abandon their morning nap in favour of a longer afternoon one. It's a natural progression and you should encourage and guide your child through the process of combining the two naps into one. The first sign that the child has reached this stage occurs when he refuses the morning nap until later on and then hardly sleeps in the afternoon. Often, the tot will want to sleep at lunchtime so perhaps trying an earlier lunch (by 15 to 30 minutes) may allow him to eat first and then nap. If he doesn't get fed before naptime, hunger will probably wake him. As the child grows, he may require a longer nap in the afternoon. If it is not affecting his night sleeping then it's healthy to leave him to it. If it does start affecting it, you should start waking him up so he has time to tire himself out again before night time (Lavin, Glaser 2007).

8 Conclusion

I hope this guide has given you some useful information to help you make some informed decisions about which arrangements and techniques are right for helping your family get a safe and healthy night's sleep. As you have seen, there is often scientific evidence that supports both sides of an argument and making decisions that effect your baby is never an easy process.

You should always try to pay attention to the new information that comes out in the media that relates to baby sleep issues. This is because science is advancing all the time and every once in a while there is an important discovery that all the experts agree upon. For the most part however, it's up to you to weigh up both sides of the argument and decide what is right for your family and unique circumstances. We have seen that there is certainly no 'one size fits all' approach to parenting. You should try to approach the media stories with a sceptical eye as they often leave out some crucial information and sometimes have a hidden agenda. I read one report for example, that concluded that co-sleeping was dangerous. However, when I investigated it further, I discovered that the report was commissioned by a cot-manufacturer! If you are in any doubt over an issue, read some more literature on the subject, or if you are concerned, consult your paediatrician.

Good luck and remember that sleeplessness nights go hand in hand with having a baby and the time your baby takes to adjust to adult sleeping patterns is in no way related to your skills as a parent. Every baby is different and his or her temperament and physiology will ultimately dictate the amount of times he or she gets you up in the night. This guide has hopefully taught you some techniques for helping with the situation but there certainly is not a safe 'quick fix' solution.

So in summary, follow the advice, have confidence in the informed decisions that you make and stick by them. Use the techniques that I have discussed but if you have any concerns when making your decisions, you may wish to talk them through with a doctor. Otherwise, informed knowledge and common sense are the best way to go. Whichever decisions you make remember that if you put the baby's safety first (as I'm sure you always do) then you can't go far wrong.

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