

# Mums Babies & You



## For Obstetric and Paediatric Professionals in Ireland

### Your FREE Quarterly Newsletter

#### Welcome to our Spring 2012 edition of **Mums, Babies & You**.

This is a very special year for Cow & Gate as we mark 125 years of proudly manufacturing in Ireland.

To celebrate, we have enclosed a gift for you which we hope you will enjoy!

In this edition, we focus on sleep management and understanding sleep in children, written by Lucy Wolfe – who spoke at our recent 5th National Antenatal Seminar. We have also included some snapshots from the day, at the Guinness Storehouse.

For now, we would like to take this opportunity to wish you a Happy St. Patrick's Day!

**The Cow & Gate HCP Team**



**Look inside  
for your  
free gift**



### Sleep Management: Understanding Sleep in Children

Lucy Wolfe, Child Sleep Consultant, 'Sleep Matters'

**Lucy Wolfe is a certified paediatric sleep consultant for children ranging from newborn babies and six-year-olds. She helps families that are struggling with their children's sleep issues, without leaving or using 'cry it out' techniques, and enables families to foster healthy sleep habits from day one. For more, see [www.sleepmatters.ie](http://www.sleepmatters.ie)**

#### Sleepless in Ireland

Globally, figures suggest that over half the world's population is sleep deprived, but closer to home, as regards to young Irish families, figures suggest one in four families is suffering from child sleep problems that go beyond the typical sleepless nights of new parenting and requisite night time feedings.

It is important that we can educate new parents about their baby's sleep and to acknowledge that although sleep problems are "common", they do not necessarily need to be endured; often, small subtle changes

can help to influence better sleep for the whole family. Evidence supports that families that have been educated about creating good sleeping habits, such as consistent bedtime routines and helping children to develop independent sleep skills, sleep significantly better than those who haven't.

#### Impact of Lack of Sleep

Sleep deprivation strongly impairs human functioning and has far-reaching consequences for the entire family unit. Generally, studies suggest that sleep disturbances are associated with a wide range of serious compromising

effects on cognition, mood and behaviour. Chronic overtiredness in children is represented by irritability, frustration, moodiness, emotional problems and aggressive behaviour. They may have a decreased capacity for memory, attention, learning and reasoning. They may begin to have dark circles under their eyes or redness around the eyes, coupled with lots of whining and crying throughout the day. Long term developmental, emotional and

physical development can be affected; poor immune systems, obesity, behavioural problems, hyperactivity and poor physical co-ordination.

Child sleeplessness typically impacts on the sleep patterns and subsequent daytime functioning of other family members. There may be an unnecessary amount of pressure on the relationship between the adults, the child and other family members. Over time, it can affect the way the parent relates to

the child and they can begin to experience negative or ambivalent emotions towards the child; find it difficult to get excited about their progress in other areas, and become intolerant during normal day-to-day activities. There are strong links between sleep and maternal depression.

### Sleep Basics

Children have an enormous sleep need from the day that they are born and that then begins to evolve and mature over the next few months of life. By about 4 months they can begin to organise their sleep, and at the same time their body rhythms are maturing as well.

Parents of new babies should be encouraged to pay attention to their baby's sleep requirements, making efforts not to allow them to stay awake for more than 45 minutes to 1.5 hours at any stage, in an effort to prevent them becoming overtired and in turn impossible to settle.

To begin to understand sleep disturbances we must first discuss some basic sleep information. Studies of human sleep demonstrates that the human body goes through a number of sleep stages and that sleep is divided into two basic types: REM (rapid eye movement) and non-REM. REM sleep is the state in which we dream. During this type of sleep we experience poor muscle tone, irregular breathing, twitching and rapid eye movement. Due to its developmental importance, babies spend more time in REM sleep. As the body begins to go to sleep, the brain starts to relax and slow down. Non-REM sleep has several stages itself: light, true and deep sleep. It is how we move from a drowsy state to a deep sleep. During this time our breathing is slow and regular. From the age of around 4 months, children's sleep begins to resemble that of adults, with only a qualitative difference; about 30% of their sleep represented by REM, as opposed to an adults 20% and the rest non-REM, alternating between the two, in what we refer to as "sleep cycles". As sleep passes through the various stages and as they alternate between the phases, they experience a "partial

arousal". These can occur within 3 to 4 hours of falling asleep at bedtime and at various other stages during the night and within 10 and 30 minutes during daytime sleep.

**Children who have not learned to fall asleep unassisted will inevitably wake up between sleep cycles and call on the parents to re-create the situations that they need to fall asleep again - feeding, rocking, patting, soother and so on.**

### The Right Kind of Sleep at The Right Time

Day time sleep has a huge impact on night time sleep, with well-napped children sleeping better at night. Children who are operating in sync with their internal body clock inevitably find it easier to fall asleep and to stay asleep, as they are cuing into their natural sleep windows and optimum time to go to sleep. In the event that a child is not on a consistent schedule or one that echos his natural body rhythms, they can become over-tired and the stress hormone cortisol gets introduced to their bodies, making it harder for them to go to sleep and to stay asleep, giving them the well-recognised "second wind".

Parents should be encouraged to identify their children's tired signals, such as yawning, rubbing eyes or zoning out. To help identify the natural

sleep window for their child, they should ensure they have a sleep-inducing, adequately dark environment, and that their babies are encouraged to fall asleep independently for day and night sleep, following a structured bedtime routine in their bedroom.

### Quality and Quantity

- The right amount of sleep for day and night (see table)
- The right kind of sleep: uninterrupted, unfragmented and motionless
- At the right times; in sync with natural body rhythms

### How Much Sleep Do Children Really Need?

Below are some general guidelines as to how many hours the average child needs. Remember, every child is different, some need more or less sleep than others - but variations should not be huge.

### Options for Parents

Obviously, various medical, psychiatric and developmental disorders exist and can prevent the child sleeping well. However, sleep disturbances in children that can be identified as behavioural normally can be addressed by intervention: identifying what the child associates at the onset of sleep and improving continuity of sleep during the night time period.

Changing the conditions under which they fall asleep and how the parents

respond to them in the sleep period can help to correct the sleeping difficulties that exist.

Parents can be encouraged to consider a variety of approaches that do not always involve high levels of unattended crying. No single approach works for all children, but the underlying finding is that all the methods are effective, when applied correctly.

The most important element is consistency. It is the key to parenting and sleep shaping success.

### Conclusion

In summary, sleep occupies 1/3 of our total lives and is a child's primary activity, having spent more time sleeping than any other activity, by the time they begin school. The fact there is proportionally such a large need for sleep indicates that it serves a fundamental purpose. It is clear that the effects of lack of sleep significantly impact on the overall functioning of both the adult and the child and in turn the family unit. Interestingly, some children will not display any of the outward warning signs of lack of sleep detailed earlier, it may remain "hidden" and present itself at a later stage in life. There are links between sleep and subsequent depression, reduced motivation to do well and poor school performances. Furthermore, studies consistently show that 25% of children display some form of sleep disturbance and empirical evidence suggests that they will not simply "outgrow" these problems. Intervention should be considered by families that are experiencing typical behavioural sleep problems in an effort to improve the sleep situation and the overall functioning of the family unit. Successful sleep training can be associated with reductions in child problem behaviour, improved parental mental health and relations.

#### References

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3. Durrand, M and Mindell J. (1990) Behavioural treatment of multiple childhood sleep disorders. Effects on child and family. Behaviour Modification, 14, 37-49
4. Mindell, J.A., A Sadeh, B. Weingard, T.H. How & D.Y Goh, (2010) Cross cultural differences in infant and toddler sleep, Sleep Medicine, V11(3).
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Reference: Ferber. R (1985) Solve Your Childs Sleeping Problems, London, Dorling Kindersley

### Useful tips for parents



- **An age appropriate bedtime.**  
Some time between 7pm-8pm is a natural bedtime for a young child. Although this doesn't always fit in with our modern lifestyle, efforts should be made to ensure that the time your child goes to bed is appropriate to what your child's body actually needs. Missing your child's sleep window can make it hard for them to go asleep and to stay asleep
- **A relaxing and calm bedtime routine should be established.**  
A sequence of events focused on helping to wind the child down and get them ready for sleep, instead of doing something to put them to sleep like rocking, nursing, walking them to sleep
- **Create a peaceful sleeping environment that is conducive to sleep:**  
adequately dark, avoiding bright external lights that can affect the sleep hormone even while sleeping. Remove any distractions, scary pictures, mirrors and images.
- **Try to avoid night time feedings once they are no longer necessary.**  
Frequent feeding throughout the night may result in a persistent requirement for night feeds with conditioned hunger, increased wetting and recurrent night-time waking
- **Put the child to bed more awake than asleep at sleep time.**  
This will allow your child to learn how to fall asleep on their own. Stay close to them and be emotionally, physically and verbally responsive to them while they perfect the skill
- **Be consistent in your responses during the night.**  
An inconsistent response during the night will result in frequent night-time waking. Changing your child's sleeping location throughout the night, lying down with them, sometimes feeding them, sometimes allowing them to play, when they should be asleep will confuse them and ingrain night time activity
- **Ensure adequate daytime sleep when appropriate for your child's age.**  
Parents often are not sure how much sleep their baby should have during the day. See opposite table to ensure your child is getting enough sleep in the day.



## Cow & Gate's 5th National Antenatal Seminar Saturday, 10th March 2012 at The Guinness Storehouse

### Key talks from this educational seminar:



- **Healthy Eating in Pregnancy**  
*Prof. Michael Turner, Professor of Obstetrics and Gynaecology*
- **Growing Up in Ireland – Findings on Pregnancy and Birth from the Infant Cohort at 9 Months**  
*Prof. Tom O'Dowd, Professor of General Practice, Trinity College Dublin*
- **Group B Strep**  
*Dr. Tom D'Arcy, Obstetrician and Gynaecologist*
- **Sleep Management: Understanding Sleep in Children**  
*Lucy Wolfe, Child Sleep Consultant, 'Sleep Matters'*

### Missed the Seminar, and want to receive copies of the talks? Contact us!

FREEPHONE: 1800 371 371 EMAIL: [hcp@cowandgate.ie](mailto:hcp@cowandgate.ie)



Elaine O'Shaughnessy, Infant Nutrition Representative, Cow & Gate; Catherine Considine (Clare); Maria Considine (Limerick)



Celebrating 125 years manufacturing in Ireland!



Geraldine Bolton, Medical Manager, Cow & Gate; Hazel Cazzini (Dublin); Sarah Burns (Tipperary); Michelle Heneghan, Infant Nutrition Specialist, Cow & Gate; Therese O'Flynn (Cork)



Roberta Tobin and Veronica Fitzpatrick (Cork)



Phil Norton; Trina Tracey; Mary Murray; Alish Kearnes and Janice Williams (Dublin)



Lara Robinson and Kay Byrne (Dublin)

## 125 years manufacturing in Ireland



2012 marks a very special milestone in Cow & Gate's history, as we celebrate 125 years manufacturing in Ireland.

It all started at the site of the first Cow & Gate factory in Ireland, based in Kildorrery, Co. Cork. There have been many changes throughout the years, but our commitment to choosing the best quality, locally sourced milk from Irish farms has remained steadfast.

From our beginnings in Kildorrery, Co. Cork, Cow & Gate now manufactures at two state-of-the-art manufacturing sites in Wexford and Macroom, Co. Cork. These facilities use the most advanced technologies to produce the best quality products. In fact, our milks produced in Wexford and Cork are exported around the world. Ireland's dairy is recognised as the best in its class, and Cow & Gate are proud to contribute to this significant industry.

Over the years, Cow & Gate has championed many breakthrough innovations to provide the best possible nutrition for bottlefed babies in Ireland. Here are just some of those breakthroughs, which marked a step forward in nutrition for bottlefed babies...

### Cow & Gate's breakthrough innovations throughout the years

- ✓ First preterm and **low birthweight formula** in Ireland (today, Cow & Gate Nutriprem)
- ✓ First specialised formula for the dietary management of **colic, constipation and possetting** (today, Cow & Gate Comfort)
- ✓ First to provide an **extensive preterm range** (including a post-discharge formula for catch up growth, and breastmilk fortifier for breastfed preterm and low birthweight babies)
- ✓ The addition of **Prebiotics** to the Cow & Gate range of milks
- ✓ First to cater for the nutritional needs of **toddlers**
- ✓ First preterm range to fully comply with the latest **ESPGHAN guidelines** for preterm nutrition\*

Today, we employ approximately 350 staff throughout Ireland and continue to advance – both our manufacturing technologies and our products. After a recent investment of €52 million, the Macroom factory, Co. Cork, is one of the largest facilities in the world, dedicated to producing the most advanced infant milk formula for bottlefed babies.

**Proudly manufacturing all Cow & Gate standard powdered milks in Ireland**



\* ESPGHAN Guidelines: The European Society of Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN), a well recognised European scientific advisory committee, has published the very latest guidelines on preterm nutrition 2. These guidelines make recommendations on the appropriate nutrition for preterm babies in relation to the supplementation of breastmilk and the composition of a preterm formula to ensure the best possible nutrition.



**Proudly manufacturing in  
Wexford and Cork,**  
using Ireland's rich dairy resources  
to produce the best quality  
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email: [hcp@cowandgate.ie](mailto:hcp@cowandgate.ie)

**Important Notice:** Breastfeeding is best for babies and will protect them from illnesses such as ear infections, stomach upsets, diabetes, eczema and obesity. Infant formula is suitable from birth when babies are not breastfed. It is recommended that all formula milks be used on the advice of a doctor, midwife, health visitor, public health nurse, dietitian, pharmacist or other professional responsible for maternal and child care.