



**“A healthy sleeping baby is key to a flourishing family. Our sleep strategy combines medical research with practical routines which assist parents achieve optimum sleep, feeding, growth and happiness in babies and children.**

Background series

## links between feeding, growth and sleep

In order to understand the link between feeding, growth and sleep it is first necessary to separate babies into two general age groups. There are simple but fundamental differences between the two. Understanding these differences is quite important in planning successful strategies for optimal sleep in your baby.

The primary objective for a baby under three months of age is feeding and growth. A baby will not sleep successfully unless they are being well fed and meeting their body’s genetic requirements for optimum growth. The best possible growth rate for a baby varies from child to child and relates to both their sex and their final adult size. Boys in particular are quite intolerant about being hungry.

After four to six months this alters. Certainly by six months this older baby needs to sleep well before they will have their best possible appetite and feeding. Thus in this slightly older age group good sleep leads to better feeding and then optimal growth. If sleeping well, feeding well and growing correctly they are happy.

### The ‘Healthy Newborn Baby’

- Attaches to the breast or bottle well, sucks well, settles well once full
- Sleeps well and for multiple sleep cycles – generally in blocks which are 90 minutes to four or even five hours long
- The bowel is open multiple times per day. 4-8 times per day is common when there is a strong milk supply
- Does not cry a great deal and when they do cry there tends to be a logic to the cry – when tired or hungry or both
- Gains weight well.

**“Research shows that offering a top-up bottle if your baby is not satisfied will support and protect your breastfeeding.”**



**Dr Brian Symon is The Babysleep Doctor. He has more than 30 years’ experience working with parents and babies experiencing sleep, feeding, growth and/or behavioural issues. He is a specialist medical practitioner with a MD (PhD) in infant sleep. Dr Symon is well published in national and international medical and research journals having researched infant sleep problems throughout his medical career. He is the author of *Silent Nights, Overcoming Sleep Problems in Babies and Children* and has another book due for release in early 2015.**

**Dr Brian Symon**  
 MD, FRACGP, MB BS, DipRANZCOG, BSc  
 e: drbrian@thebabysleepdoctor.com.au  
 p: (08) 8332 4077 f: (08) 8431 1101  
 w: www.thebabysleepdoctor.com.au  
 f: www.facebook.com/thebabysleepdoctor



**The  
babysleep  
Doctor**  
 ... helping babies to sleep  
 and families to flourish

## links between feeding, growth and sleep

### Achieving sleep in all babies

- Human sleep is cyclical
- In babies sleep cycles are about 45 minutes long. In toddlers sleep cycles are a little longer, about 60 minutes
- Sleep achievement is driven by tiredness and 'cues of sleep'
- Cues of sleep are learned, can be altered and relearned. Babies learn rapidly.
- Both sleep achievement and sleep maintenance are usefully regarded as learned skills.
- Cues of sleep which are parent independent or 'Parent-lite' are the most useful
- Successful sleep achievement relies on a baby being fully fed and not overtired.
- Hunger and over-tiredness are the enemies of sleep as they interfere with the learned skill of sleep achievement.
- The aim is to put the baby down fully fed, warmly dressed and alone before they become overtired.
- A baby less than three months old must be well fed to sleep well
- An older baby has to be well slept to have their best appetite, feeding and behaviour.

Baby – birth to 3 months	Older baby – 4 months +
<b>Feeding</b>	
<p>There are many ways to healthily and successfully feed a newborn baby; it is likely that breast feeding will be your initial choice. Breast feeding is a biological variable. Like all biological variables a woman's breast milk volume and the milk's energy density varies from women to women. Whilst every breast feed has benefits for both mother and baby;</p> <ul style="list-style-type: none"> <li>• Some women have less milk, some more</li> <li>• Some days there is less, others more</li> <li>• Some women produce 'full cream', others 'skimmer'. This is genetically determined and can't be altered.</li> </ul> <p>If your baby is not fully satisfied at the breast it is ok to offer a top-up bottle of expressed breast milk or formula.</p>	<p>Generally has commenced complementary feeding by 8-12 weeks of age – see Information Sheet, <i>Starting Solids</i>. The volume of complementary feeds varies dramatically from baby to baby and it is important to allow the baby to let you know when they are full. An overtired baby will have a decreased appetite.</p>
<b>Sleeping</b>	
<p>In the first month, life is almost exclusively feed, sleep and grow. After about three to four weeks the baby will have developed short 'Happy Wake Times' [HWT] – see Instructional Pamphlet, <i>Happy Wake Times</i>. The longest block of sleep is about equal to the babies age in weeks – 6 hours at 6 weeks and in an ideal outcome about 12 hours overnight by about 12 weeks of age.</p>	<p>Night time sleep should be 12 hours and day time sleeps vary with age (Instructional Pamphlet, <i>Sleep summary: First five years</i>). Unless the sleep volume is appropriate the baby will have decreased appetite and be less content.</p>
<b>Growth</b>	
<p>Growth rates vary, 30 gm per day reasonable but everything from 20-60 gm per day may be correct for your baby to be content.</p>	<p>The rate of growth begins to slow.</p>
<b>Behaviour</b>	
<p>The causes of crying are;</p> <ol style="list-style-type: none"> <li>1. hunger</li> <li>2. over-tiredness</li> <li>3. both.</li> </ol> <p>It is important to avoid complex labels. Assuming that your baby is well there is little benefit in using labels such as wind, colic, reflux teething, tummy pain. The reality is that if we achieve good feeding, appropriate growth and avoid over-tiredness, the large majority of babies sleep and feed well. In the clinic a diagnosis for reflux occurs once per year or less. In Australia about 25% of babies are on some form of treatment for reflux. Through experience, if we achieve the best outcomes for feeding, growth and sleep very few babies need medication.</p>	<p>The baby now has a range of social and communication skills. If sleep, feeding and growth are going well the baby tends to be happy almost all the time</p>