


# *understanding* **DEVELOPMENTAL MILESTONES – PART 4**

*Wake up the left and right brain – rolling over.*

A baby who suckles with ease and can feed turning her head left or right to latch, can effortlessly hold her head up and turn it in all directions to see what is going on, and has developed strong back and tummy muscles after hours of rug time, is ready to become mobile. Rolling over is a baby's first step towards starting to creep and crawl, and making contact with the world around her.

 Early in life, movement activities such as the ability to suck, to roll, to sit and to crawl, to cruise and to walk indicate that the brain and body are developing. These developmental milestones are beacons indicating that not only is the baby growing, she is also developing all the

basic neurological wiring that will be needed later in life to enable her to sit upright, sit still, concentrate while sitting, skillfully hold and manage a pencil or pen, and read and write with ease.

In this series of articles, the importance of the following milestones has been explored:

- rooting and suckling
- stable neck and head turning
- strong tummy and back muscles.

A baby who has attained these milestones has developed all the basic wiring needed between the senses, brain and muscles in preparation to explore the environment. Until now, baby's sole focus was self-soothing and discovering her own body and what it can do. Now she is ready to become part of the world around her.

#### HOW DOES ROLLING OVER DEVELOP?

Rolling over is the result of those hours baby spent flat on a rug, exploring her range of movement when on her back or tummy – hence the term 'rug time'. When a baby explores the range of her arm and leg movement freely and her movement is not hampered by a pram, reclining chair or supportive cushions, she becomes aware of her direct environment and wants to explore it. This prompts the urge to become mobile – an urge that is neurologically supported by the asymmetrical tonic neck reflex (ATNR).

The ATNR is an involuntary response to turn the head to the side, while automatically extending the arm and leg to the same side, with the other arm and leg flexed. This action develops differential movement on either side of the body. The function of the ATNR is also to establish the lateral midline

by moving the arms and legs in a one-sided way – left arm and leg together, then right arm and leg together. This one-sided action is a precursor to crawling and stimulates the development of the left and right sides of the brain and body.

#### ROLLING OVER STIMULATES THE LEFT AND RIGHT BRAIN

Stimulating the left brain is important because it lays down the foundation for language development, logical reasoning, planning and organisation, attention to detail, and the ability to store facts in an orderly manner.

Stimulating the right brain is important because it wires the baby's brain to be flexible and able to solve problems creatively. A stimulated right brain also means that the baby can grow up to be a lateral thinker, with good spatial skills and the ability to see the bigger picture.

Because of the diverse functions of the left and right sides of the brain, rolling over in both directions is important.

Rolling over to the left and right means that your baby is not left- or right-brained but becoming whole-brained.

#### WHY DOESN'T MY BABY WANT TO ROLL OVER?

Babies who are left in reclining chairs or in a pram, and full-term babies who are tied to an adult's body for hours at a time, tend not to roll over because of lack of opportunity to do so.

Limited space means limited opportunities to explore movement, and may result in interruption of the natural unfolding of the developmental stages and cause a delay in reaching developmental milestones.

Poor neck control, a lack of core stability and low muscle tone would also limit the chances of baby rolling over.

#### WHAT CAN I DO?

Make sure that your baby suckles well, has good neck control and has strong tummy and back muscles by allowing him to play unsupported, flat on the carpet. He may moan a bit, but encourage tummy time by placing a colourful toy on a plain mat just out of reach. Sit on the rug with him and encourage him to reach for the toy.

Make sure he is not wearing restrictive clothing, as this will inhibit movement.

If your baby finds it difficult to roll, you can help him do it until sufficient muscle memory has been created. Then only roll him onto his side, and let him complete the rolling process on his own. Repeat this for a few days until baby starts rolling over by himself.

#### WHAT MAY HAPPEN IF MY BABY DOESN'T LEARN TO ROLL OVER?

If your baby doesn't roll over, his back and tummy muscles may not develop enough, which may subsequently lead to sitting with a rounded back, poor posture and the need for support to stay upright. If this persists to school-going age, the child may battle with concentration and completing a task because he tires too easily.

The following problems may also result from not rolling over:

- an inability to cross the midline
- the head cannot turn independently of body movement – if the head turns to the side, the arm and leg follow
- the child may appear clumsy and uncoordinated when skipping and galloping



**DR MELODIE DE JAGER**, B PRIM ED, B ED PSYCH, M ED PSYCH, D PHIL, is a qualified nursery school teacher, a keynote speaker, and author of *Brain Gym For All* (on the Exclusive Books Guru List for Inspirational Literature), *Mind Dynamics*, *BabyGym*, and *Mind Moves – Removing Barriers to Learning*. She is Chairperson for the BabyGym Institute and Mind Moves Institute. In 2007 she won the Direct Selling Association: Visions of the Future Award for her BabyGym programme. Melodie is passionate about the empowerment of disadvantaged communities through quality education, deeply interested in spiritual matters, and a committed mother to her three children.



**Schär wafers... perfect for wheat-free diets and enjoyed by all...**

**TASTE FOR LIFE**  
**Schär**  
GLUTEN-FREE WHEAT-FREE

Schär products are available at:  
**Dis-Chem PHARMACIES**

Health Food Section,  
Health Shops, selected Spar Supermarkets and Thrupps  
For further information visit our websites:  
[www.glutenfree.co.za](http://www.glutenfree.co.za) or [www.masterhealthproducts.co.za](http://www.masterhealthproducts.co.za)  
or Telephone 011 803 5445

- unable to establish dominance
- the eyes jump in the midfield when tracking from left to right
- takes up the whole desk, can't stay on one side
- difficulties with completing a symmetrical picture
- poor visual perception
- aversion to reading and writing due to midline problem
- moves head to read.

What can I do when my child displays any three or more of these indicators?

If your child displays three or more of the above, it will be worthwhile to visit an occupational therapist with sensory integration training.

If this isn't possible, the following movement sequence will prove helpful. Repeat the sequence daily for six weeks.

Rolling over is a precursor to crawling and later to reading and writing with ease. It is worth the effort to encourage baby to roll to the left and to the right. Pack away the pram, supporting chair and walking ring, and unfold the rug! ●

**Bibliography**

1. De Jager M. Mind Moves – Moves that Mend the Mind. Johannesburg: Mind Moves Institute, 2009.
2. De Jager M. BabyGym. Welgemoed: Metz Press, 2008.
3. De Jager M. Mind Moves – Removing Barriers to Learning. Welgemoed: Metz Press, 2009.
4. Goddard Blythe S. What Babies and Children Really Need. Gloucestershire: Hawthorn Press, 2008.

**MIND MOVES CORE WORKOUT – DONE LYING DOWN**

**Step 1.** Lie on the back. Slowly move the left arm and leg as if tied together and turn the head to look at the left hand. Slowly move the right arm and leg as if tied together and turn the head to look at the right hand. Repeat 10 times.

**Step 2.** Remain on the back and repeat step 1, but slowly move the head in the opposite direction of the extended arm and leg. Repeat 10 times.

**Step 3.** Still on the back, tie a blue ribbon to the left arm and right leg, and a red ribbon to the right arm and left leg. Bring the red arm and leg together and extend the other arm and leg without any head movement. Then bring the blue arm and leg together and extend the red arm and leg, without any head movement. Repeat 10 times. Relax.

**Step 4.** Once steps 1 - 3 can be performed without difficulty (this may take weeks), crawl on all fours and turn the head to the left and right.

**Step 5.** Once step 4 is done with ease, ask the child to stand up and do a bilateral crawl while eyes turn up, down, left, right; focus near and far. NO head turning allowed.

**are you ready for winter?**

Treat the whole family's colds & flu this winter naturally & effectively with the pegasus range Individual remedies are available or go for the cost-effective option: Invest in a **bluebox kit**



**why is the bluebox a must-have?**

- compact for travel
- easy-to-use & to dose kids
- safe in pregnancy, infants
- once-off purchase, refillable
- comprehensive info booklet
- excellent value R20 per item
- 23 remedies treat sinusitis, colds and flu, travel sickness, infections, nausea, diarrhoea, allergies, stings, injuries etc



In pharmacies & health shops 021 712 0324 [www.pegasuskits.com](http://www.pegasuskits.com)



*Big* **NUTRITION**  
*for* **LITTLE PEOPLE**

**SOLGAR Vitamins | INNOVATION AND QUALITY Since 1947**

Available from Independent Health stores and Healthcare practitioners  
For more information email [info@solgar.com](mailto:info@solgar.com) | Visit [www.solgar.com](http://www.solgar.com)

**CAREFULLY MANUFACTURED in the USA BY SOLGAR LABORATORIES**

