# Stimulating the sucking reflex in infants

Feeding is a life saving action and even though it is seldom viewed as a motor milestone, it is a baby's first motor milestone after birth.

But isn't baby's APGAR score his first motor milestone? The APGAR score is the baby's first test in life to see if his **reflex reactions** are in place so he can survive outside the womb and without life support. Without these reflexes a baby's heart is neither able to beat; nor can he breathe, control his temperature, be alert, grasp, suck or adjust in a way that will ensure his survival so that he can develop.

## How the suckling reflex develops

The ability to suck starts around 9 weeks after conception when the Moro-reflex prompts the newly shaped mouth and hands to open up. Around week 12 and after opening and relaxing the mouth and hands many times, the baby has developed enough muscle tone to close his mouth. If his arms have grown long enough by now for his hands to reach his mouth, baby starts to suck his thumb every time it touches his cheek or mouth. Thumb-sucking develops the feeling-brain and helps the baby to relax and release feel-good hormones that gives his immune system a boost and stimulates growth.

## Most babies can suck but not all babies can suckle

*Sucking is for nurturing (to feel good)*
*Suckling is for nourishment (food)*

A **sucking** baby feels nurtured, because the rhythmic pressure of his tongue on his palette is soothing and helps baby to relax and dissolve stress hormones secreted when he is startled or stressed. Sucking for nourishment is called **suckling**. Sucking with an 'L' – suckling, is much harder than sucking because baby needs to grasp mom's breast firmly with his lips, his tongue needs to cup around the nipple or teat and he needs to suck in such a way that he creates enough suction to get quality milk. Positive association with touch and an ability to suck are important but so is swallowing and rhythmic breathing.

The baby learns to swallow around 24 weeks gestation when he starts drinking little bits of amniotic fluid. He also learns to make breathing movements, but his oxygen doesn't originate from his lungs, the oxygen is still provided to the baby through the umbilical cord. It is only once he has been born and has taken a deep breath, that his breathing supplies his brain with oxygen.

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A suckling baby easily bonds with mom; gets quality food; sleeps more and develops with greater ease. Sometimes when baby doesn't have a positive response to touch, the baby may reflexively pull away from mom as if he doesn't like her at all and cries. The mother may feel rejected and like a failure. She may in turn find it difficult to hold baby and bond with him. This is a real catch 22 situation- he desperately needs her touch, but for some reason or another he is afraid of touch. A baby tends to withdraw from touch when he has had a rough time in-utero or during birth. If the mother doesn't know this, she may not know to give the baby a good deep pressure massage even though he may cry. When the mother provides a deep-pressure touch through containment-hold (swaddled while being held tightly in the arms, or kangaroo care), it has the same effect as when she touched her tummy during pregnancy and baby sensed her acceptance and moved towards her hand. This welcoming action transforms his instinctive withdrawal from touch, to a positive association with touch. The baby then starts seeking touch and feeding becomes easier. Swaddling a baby with his hands close to his mouth provides the optimal positioning and quiet, deep touch, which assist in brain-organisation.

The baby's positive association with touch and mom's smell and taste are crucial steps towards baby finding the nipple when his eyes are still unable to see clearly. Initially baby finds the nipple through **smell** and **taste** but after a while baby turns towards the nipple when baby **sees** the nipple.

## Why doesn't baby want to suckle?

Sometimes a newborn baby doesn't suckle well and mom can feel desperate and helpless. There are many reasons for suckling problems. Some of them are:

- a negative association to touch (can be due to needles, pain, etc.), resulting in the baby pulling away in order to self-protect
- a negative association to the smell of the surroundings, or if mom's body is bathed in antiseptic or perfume
- bright lights
- a premature birth
- a difficult birth
- neuro-developmental delays
- problems with breathing or a lack of oxygen
- assisted birth
- mom's anxiety
- early separation from mom at birth
- baby signalling time-out cues

## *What can I do to encourage baby to suckle?*

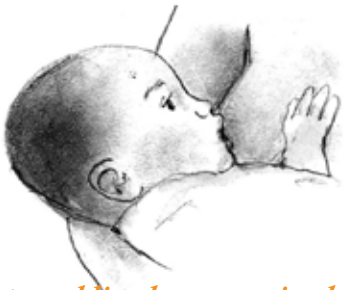
Research at the BabyGym Institute SA has found that the following BabyGym activities are effective in stimulating the suckling reflex:

- Gently simulate contractions around the crown of the head by rhythmically and gently applying and releasing pressure before a feed and even during a feed when he is about to fall asleep and not done yet.
- Gently move baby's chin down with two fingers and rest two fingers around baby's belly button. Massage both points simultaneously. Remember that the umbilical cord was the original source of nourishment. Stimulating both points simultaneously encourages the transition from being fed to actively feeding.
- Stimulate suckling by massaging baby's hand and applying pressure into the palm of their hand whilst feeding. This stimulation occurs due to the neurological connection between the hands and mouth.
- When bottle feeding, simulate breastfeeding as far as possible: use a teat that looks like a nipple (long and round with a small opening) and hold baby whilst feeding. Swop arms mid-feed and make eye contact.

Research by Michel Odent has shown that the dynamic infant-parent interaction is the most important foundation upon which a child learns about self, trust and respect. It is this first relationship that influences the way all relationships are perceived and learning occurs later. Stimulating suckling in a baby develops a healthy self-esteem and the speech organs– it is worth the effort!

*De Jager, M. 2011. brain development MILESTONES & learning.Johannesburg: Mind Moves Institute.*
*www.babygym.co.za*

*Encouraging the transition from being fed to actively feeding*



*Stimulate suckling by massaging baby's hand*

*Simulate breastfeeding when bottle feeding*

## Book Review

By Sr Ida Pretorius


**Brain development MILESTONES and learning. BabyGym & Mind Moves Brainboosters**

**1st Edition**
**Author: Melodie de Jager**
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"The brain is without a doubt our most fascinating organ. Parents, educators and society as a whole have tremendous power to shape the wrinkly universe inside each child's head, and, with it, the kind of person he or she will turn out to be. We owe it to our children to help them grow the best brains possible'. (Lise Elliot). This book, written by Dr Melodie de Jager, is a must-have tool for every Antenatal Teacher and Healthcare Professional working with parents and babies. It details the brain development of a fetus, and that of an infant soon after birth. Melodie elaborates on the development of the central nervous system and all the senses of the infant during pregnancy and after birth, until 6 years old and older. She gives practical tips based on evidence-based research done at the BabyGym Institute.

This book is a wonderful tool as it empowers Clinic Sisters to give parents correct advice in cases where developmental delay is noticed. A must-have!

This book is available to order online at: www.babygym.co.za/bookshop_milestones.php