

ISSUE 6 | MARCH | 2011

# breastfeeding Today

## Skin to Skin

National  
Best-seller!



Celebrating The  
New Baby

## New Insights on Nipple Shields

la leche  
league   
international | [lila.org](http://lila.org)

# breastfeeding Today

[04]

## Skin to Skin



Photo: shutterstock.com

[08]  
Mothers' Stories  
[08] Motherly LLLove



[09] Answering  
Questions

[12] Breastfeeding  
An Ailing Child

[14] Lovely,  
Comfortable  
and Right!



[16, 28]  
LLL News



[18]  
Uplift of  
Our Series  
Meetings

[19]  
What's Cooking  
Vegan



[21]  
Your Letters



[22]  
New Insights on  
Nipple Shields



[25]  
Celebrating  
The New Baby



[26]  
Breastfeeding  
In The News

[28]  
Donors Making  
A Difference



**Managing Editor** | Barbara Higham

**Contributing Editors** | Kathy Abbott, Johanna Horton, Barbara Mullins, Lesley Robinson

**Review Board** | Barbara Emanuel, Gwen Gotsch, Carol Kolar, Kathleen Whitfield

**Art Director** | Ronnelito Larracas

**Cover Photo** | shutterstock.com

**Advertising Manager** | ReNata Bauder

**Web Development** | Dave Davis, Shelly Stanley

Acceptance of paid advertisements does not constitute an LLLI endorsement of the product advertised. LLLI does not require advertisers to carry product liability insurance.

### Mailing Lists:

LLLI sometimes makes its mailing list of members available to reputable outside groups. If you prefer not to receive these mailings, notify LLLI.

La Leche League International fully supports the WHO (World Health Organization) International Code of Marketing of Breastmilk Substitutes. LLLI Board of Directors, (2009, 2010)

*Breastfeeding Today* is published by La Leche League International Inc., 957 N. Plum Grove Road, Schaumburg, IL 60173 USA. Telephone 847-519-7730 (9 AM to 5 PM Central Time). Visit our Web site at [llli.org](http://llli.org).

Canadian subscribers should contact LLL Canada at PO Box 700, Winchester, ON K0C 2K0, Canada, or go to [www.lalecheleaguecanada.ca](http://www.lalecheleaguecanada.ca) with any questions about subscriptions.

## Skin to Skin

When my first baby was born he failed to breathe straightaway and was rushed away from me to a neonatal intensive care unit so that we were apart for the first few hours of his life. When we were reunited, my baby was already dressed and when I first attempted to put him to my breast there was very little in the way of direct contact between us because we were both fully clothed. Perhaps this, as well as a difficult birth, partly accounts for the difficulties we encountered with breastfeeding. Felix fought the breast and it was weeks before he eventually got the hang of nursing well. In the lead article, Jill Bergman examines the importance of skin-to-skin contact between a newborn baby and his mother and how this simple practice can often avoid the stress of separation and promote physical and emotional health, as well as facilitating breastfeeding.

Naomi Stadlen's article illustrates how La Leche League Series Meetings give breastfeeding mothers a safe place to acknowledge their difficulties and how this mother-to-mother sharing can really raise our spirits, regardless of whether we find solutions to the questions we brought to the meeting.

In this spring issue, Gina Kruml examines how we might celebrate the arrival of a new baby and Nancy Mohrbacher shares new insights on nipple shields.

We take a look at what exciting things are happening in LLL globally and four mothers share their breastfeeding stories and tell about the support they found from other mothers through LLL.

"What's Cooking" takes a look at vegan cookery and gives us three easy recipes that make up a healthy, green and delicious meal.

Mothers sharing their experiences to help one another is LLL's particular strength. Please help us to spread this support around the world through *Breastfeeding Today* by writing to [editorbt@llli.org](mailto:editorbt@llli.org)

## Barbara

Barbara Higham | [editorbt@llli.org](mailto:editorbt@llli.org)

Barbara is a La Leche League Leader, managing editor of *Breastfeeding Today* and co-editor of LLLGB's *Breastfeeding Matters*. She lives in the spa town of Ilkley, West Yorkshire in the north of England with Simon and their children, Felix (12), Edgar (9) and Amelia (5).

# The importance of skin-to-skin contact for every newborn



Stephanie Wernbo and baby Alex courtesy of Socha Blackburne

Modern childbirth has become a medical condition requiring delivery in a hospital with doctors and nurses in attendance. Our neonatal mortality rate has decreased in the last 200 years, which is a wonderful thing. However, recent studies of neuroscience of the newborn have shown that our modern care may well be at some cost to the baby's brain. What we now know is that newborn brain development is dependent on mother's presence!

Inside mother the fetus is held warm and safe, loved and protected by mother's body. Sounds are muffled, and mom's familiar heartbeat and voice reassure the baby. His heart rate and oxygen saturation are optimal. The moment of birth then is a huge transition, but his development has prepared him for this change. After the actual birth he is able to regulate his systems because ideally he is held in the safe place that mother's chest provides.

However, our modern care often takes the newborn into the world of lights that are too bright for his sensitive eyes, loud sounds that he cannot block out, and strange new smells. Often a newborn is taken and weighed on a cold scale, or bathed or routinely suctioned. But worst of all for his adapting brain is that he is taken away from his mother, his SAFE place. Separation from mother is highly stressful, and is enough to make a baby physiologically unstable. He feels unsafe, his brain sends "danger" signals to the body. His brain releases the stress hormone cortisol, which increases the heart rate and breathing in a basic "fight or flight" reaction. Somatostatin is also released and acts in the gut to decrease absorption of food and thus inhibit growth. These stress hormones will continue to affect the baby while he is separated from mom. When returned to his mother, the stress hormones still take 30 minutes or even an hour to wash out of his system.

The separated baby will protest and cry to call for mom. His arms and legs will wave or jerk to get his mother to come back. The crying can also open the foramen ovale, a flap between the two sides of the heart, thus restoring fetal

Skin-to-skin contact will help the baby maintain a steady body temperature. If the baby is cold, the mother's chest will heat up to warm her baby, or to cool him if he is too hot.

circulation, which now pumps deoxygenated blood to the brain. This crying increases the heart rate and blood pressure in the baby's brain, which can damage the tiny capillaries, maybe even causing an intraventricular hemorrhage (IVH).

All of this intense protest activity uses up vital calories that should be used for growth. If the baby's protest signals are not heeded, the baby may go into an energy-conserving defense mode, which lowers heart rate and temperature for prolonged survival. This state of "freeze" may look like the baby is asleep, but recent neuroscience research has shown that the baby may be firing pathways in the brain that in later life tend to increase anxiety. A final stage of defense is called "dissociation" in which the baby essentially "tunes out." This whole process reinforces emotional pathways in the baby's brain, laying down wiring adapted to cope with "a dangerous world, where nobody loves me." Too much time spent in this state of distress, away from mother, can have lasting emotional effects. Adult mental health is based on infant

mental health, and we know that caring for infant mental health starts early, even in the first hour after birth. This capacity of the newborn is new knowledge. Many babies cope fine away from their mother, but for the more sensitive we want to avoid the stress of separation in future. Obviously not all separated babies will have problems as adults, but all experience separation as stress.

In summary, separation of the newborn baby from the mother is the primary cause of newborn stress. This can show itself in increased heart rate, blood pressure and decreased oxygen saturation in the blood. These physiological effects of separation can lead to a cascade of problems and complications requiring more intervention from the neonatal health system.

Most of this could be avoided by the mind-blowingly simple practice of putting every newborn baby naked onto mom's bare chest, drying him and covering both of them. All of the necessary newborn observations and tests can be done while leaving the baby in his SAFE place. This alternative to separation-stress is called "skin-to-skin contact."

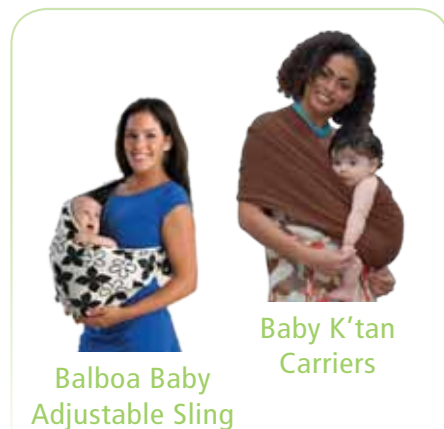
### So what are the positive effects of skin-to-skin contact?

Skin-to-skin contact will help the baby maintain a steady body temperature. If the baby is cold, the mother's chest will heat up to warm her baby, or to cool him if he is too hot. The autonomic nervous systems (ANS) of the mother and baby coordinate to establish healthy and stable set points of blood pressure, temperature, heart rate and glucose. This allows the baby to "self-regulate" better when stressful events rock his equilibrium. But until the baby has established those set points he needs the "buffering protection of adult support." In the absence of this support, metabolic set points may not be properly established and this can increase problems of hypertension, obesity and diabetes in later life.

Many of you will be familiar with the "self-attachment" behavior of the newborn on mother's chest in the first hour of life. The baby's small movements on the mother's chest in moving

his way to the nipple and touching it stimulates a wonderful interaction of hormones in both mother and baby's brain and body as follows.

The baby stimulates the mother's breast and areola, and the mother's ANS tells her hypothalamus and pituitary to release the hormone prolactin which causes the breast to start milk production. Note that it is the behavior of the baby which ensures that milk will be produced by the breast; the baby is in effect making his next meal! Prolactin is released in the baby as well, which stimulates oligodendrocyte cells, which make the myelin that will coat the nerves and speed up the sending of messages in the brain. The release of prolactin in the baby also stimulates production of surfactant, which helps the newborn baby's lungs to breathe better.



Balboa Baby Adjustable Sling

Baby K'tan Carriers

Carriers are used by parents to support their babies in a variety of positions. While you attend to daily tasks, your baby can enjoy the closeness of your body. For more information shop online at [store.lli.org](http://store.lli.org) or call 800-LALECHE.



Balboa Baby shopping cart cover

Simple and fashionable providing a clean & secure environment for babies. For more information shop online at [store.lli.org](http://store.lli.org) or call 800-LALECHE.

# Skin-to-skin contact at birth for stabilization of EVERY newborn is a simple yet profound intervention, which increases the physical, mental, emotional and social stability and well-being of the baby.

Oxytocin is well-known as the “love hormone” and also for its action in the Milk Ejection Reflex. However it is also a neurotransmitter in the brain, and is released primarily in response to skin-to-skin contact. In the mother’s brain the oxytocin suppresses the cingulate gyrus, which is the fear centre of the brain, thus making the mother fearless to protect her baby. Oxytocin release in the baby stimulates the brain pathways for approach, and the baby opens his eyes and gazes at mother. This is the beginning of the vital first bond that is the foundation of all other relationships.

The baby suckling also stimulates the release of cholecystokinin in the mother, which acts on the amygdala to produce a sense of contentment and well-being. In the baby this same hormone not only produces a sense of calm, it also aids self-regulation of digestion.

These three powerful hormones have thus worked in both mother and baby to wire neural circuits for a well-bonded, well-regulated mother-infant pair. The basic biological needs for warmth, nutrition and protection are thus provided from the very beginning. This early bonding fires security in the baby and instinctive protection behavior in the mother, and sets the mother-baby pair on a course of healthy development and secure relationships.

Skin-to-skin contact at birth for stabilization of EVERY newborn is a simple yet profound intervention, which increases the physical, mental, emotional and social stability and well-being of the baby. This is every baby’s right. The number of hours of skin-to-skin contact a baby receives in the first day of life has been shown to enhance his mother’s sensitivity to his cognitive development and emotional security even a year later. This also predicts the attachment relationship and social intelligence. Obviously if that early contact has been missed it can be made up later.

These are just a few reasons for adjusting and modifying our health care practices to give every baby the best start. All of the above are valid benefits for EVERY newborn baby. For a fragile and sensitive preterm baby, skin-to-skin contact at birth is even more important for stabilization and minimizing stress. If technology needs to be added, it should be done on mother’s chest, the baby’s SAFE place.

## Summary of benefits of skin-to-skin contact for baby

**Physical:** heart rate, breathing and temperature are better.

**Emotional:** feels safe so less stress and crying.

**Mental:** better sleep and brain wiring for development.

**Breastfeeding:** gains weight, home sooner.

**For Parents:** less stress, better bonding.

## Resources

Amodio DM, Master SL, Yee CM, Taylor SE. Neurocognitive components of the behavioral inhibition and activation systems: Implications for theories of self-regulation. *Psychophysiology* 2008;45:11-1.

Schore AN. The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal* 2001;22(1-2):201-69.

Carter CS, Altemus M, Chrousos GP. Neuroendocrine and emotional changes in the post-partum period. In: Russell JA, Douglas AJ, Windle RJ, Ingram CD, editors. *The Maternal Brain*. 133:241-9. ed. 2001. 241-9.

Ross HE, Young LJ. Oxytocin and the neural mechanisms regulating social cognition and affiliative behavior. *Front Neuroendocrinol* 2009 Oct;30(4):534-47.

Bigelow AE, Littlejohn M, Bergman N, McDonald C. The relation between early mother-infant skin-to-skin contact and later maternal sensitivity in South African mothers of low birth weight infants. *Infant Mental Health Journal* 2010 May;31(3):358-77.

More details on the neuroscience of newborns can be found in *Hold Your Premie. A workbook on skin-to-skin contact for parents of premature babies* and in the DVD “Hold your Prem” available from [www.kangaroomothercare.com](http://www.kangaroomothercare.com). You can also read more about research on skin-to-skin contact on this Web site.