



## **Natural Labor Benefits Both Mom & Baby by Dr. Linda Folden Palmer**

Natural labor is not simply something for mothers to endure; the process provides key mental and physical benefits for mother and baby. When not interfered with, natural labor helps to protect the fetal brain, prepare his lungs, and build his immune system. When uninterrupted, hormonal interplays provide imprinting and attachment between mother and baby, protect mother's mood, and initiate instinctual parenting behaviors.

### **Oxytocin and the Mother**

Oxytocin is a feel-good, bonding hormone that acts throughout our lives in response to togetherness and especially to skin-to-skin contact. Oxytocin's strongest employ by far is during and immediately after birth. Its release during labor provides the contractions needed to expel the baby. As mother's body feels the vaginal passage of the child, further oxytocin surges are stimulated and much higher levels now remain in the brain.[1]

This exceptionally high brain oxytocin just after birth provides for a powerful imprinting between mother and newborn as they smell each other and gaze into each other's eyes. Remaining quite high in the brain for an hour or more after birth, oxytocin provides mother and baby with feelings of trust, calm, and well being, while also causing a little impairment in memory so they forget some of the discomfort experienced. When not impaired, this hormonal high also sets the stage for successful initiation of breastfeeding. The first nursing attempts then lead to continued oxytocin release. When occurring shortly after birth, this serves to help shrink the uterus, preventing hemorrhage.

This entire oxytocin experience acts in mother's brain to initiate affectionate maternal behaviors,[2,3] helping first attempts at nursing to feel quite natural and teaching mom to want nothing more than to hold her baby and respond to his cries. While brain changes occur during pregnancy and in response to later physical contact, especially nursing, this post-birth window created by natural labor leads to some valuable reorganizing of receptors in mother's oxytocin and stress responding portions of her brain.

High oxytocin in the female brain has also been shown to promote preference for whatever male is present during its surges,[4] (one good reason for dad to hang around after the birth).

### **Interrupting the Body's Plan**

Pitocin is an imitation oxytocin used to induce or enhance labor. This synthetic agent does not cross **mother's** blood-brain-barrier and hence artificially induced mothers miss out on a large part of oxytocin's bonding, calming, mood elevating and amnesic benefits. If anesthesia is used during labor, there is no maternal oxytocin response to the vaginal passage, hence the mother misses the rest of her opportunity for the beneficial brain effects, and her maternal behaviors are not naturally switched on.[5] Cesarean section without labor fails to produce any of this extraordinary oxytocin experience, while labor before C-section provides a portion.

When a baby is born highly drugged, he is less able to partake from the oxytocin-provided benefits of calming, bonding, and drive to breastfeed.

Preventing mothers from these potent oxytocin surges in their brains can lead to increased risks of postpartum depression and poor bonding.[6-9] It has been found that the oxytocin levels secreted during nursing remain low for at least two days following a C-section, with a notable increase in mother's anxiety level and decrease in her breastfeeding success.[10,11]

Many other hormonal interplays occur during labor, and most are affected by interventions in the natural process. Endorphins, the body's own natural pain reducers, increase steadily throughout natural labor, however, use of Pitocin prevents their increase.[12] Maternal stress during labor, generally caused by a lack of continual, compassionate maternal support, causes heightened release of stress hormones. This alters mother's stress handling for some time and raises inflammatory factors associated with the development of postpartum depression.[13]

### **Protecting the Baby**

Mother's oxytocin crosses the placenta into the fetal brain during labor, silencing the brain so the child is less stressed by the birth process. In addition, the brain is made to be less vulnerable to damage from periods of reduced oxygen or blood sugar. Even if Pitocin can enter the fetal brain as well, any natural regulation of appropriate levels would be absent. It is known that excess uterine stimulation typically seen with Pitocin use creates dangerous episodes of oxygen depletion in the fetal brain. Maternal protection of the fetal brain is not bestowed by Cesarean delivery without labor.[14,15] Mother's body also supplies very important sugar to baby's brain during labor. This provision is often impaired, however, when mothers are restricted from food and liquid intake during the birth process.

Baby receives certain antibodies from mother during the last term weeks in the womb but the majority of this transfer occurs during labor.[16] The lack of antibody transfer may be one factor in the reality that infants born via low-risk elective cesareans have a tripled death rate in the first month of life, versus vaginal births,[17] though the lower success in breastfeeding after Cesarean is likely a larger factor.

The hormonal changes of natural labor help to quickly clear fluids from the fetal lungs through a process of absorbing fluids out of the lungs, along with some mechanical clearing from the contractions themselves. When labor is artificially induced, infants suffer from breathing distress more than twice as often as with spontaneous labor.[18] In Cesarean section without labor, an infant is 4 times as likely to suffer respiratory distress.[19-20] This impact on the lungs is evidently long lasting as babies born via C-section are shown to suffer from allergies twice as often as those delivered vaginally.[21]

### **Striving for the Healthiest Outcome**

All is not lost if the birth process does not go entirely as planned, yet birth choices affect a momentous first chance for attachment and breastfeeding success. Natural delivery determines a major cornerstone in preventing infant illness, while boosting mother's parenting satisfaction. A child is born seeded with specific potential (nature), yet parenting choices (nurture) will greatly influence whether these latent abilities will come to fruition.

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