

HORMONES

naturally produced

IN LABOR

OXYTOCIN

the love hormone

Oxytocin is secreted during sex, male and female orgasm, birth, and breastfeeding, and is known for engendering feelings of love and altruism.

Oxytocin causes the rhythmic uterine contractions of labor, the powerful contractions that birth baby at the end of labor, the placental ejection reflex and the milk ejection, or let-down reflex, in breastfeeding.

Baby produces oxytocin during labor, too. After birth, both mother and baby are bathed in this and other significant hormones. Continued oxytocin production is enhanced by skin-to-skin and eye-to-eye contact and baby's first suckling.

ADRENALINE & NORADRENALINE

fight or flight hormones

Adrenaline & noradrenaline are released in response to stresses like fright, anxiety, hunger, cold, and even excitement.

High levels of these hormones in early labor lessens oxytocin and slows labor. This is because high levels are associated with danger; a mother's instinctual response is to postpone baby's birth until safety is reached.

In the final stages of labor, a sudden increase in adrenaline and noradrenaline gives the mother a rush of energy, so she is upright and alert, breathing well and maybe grasping something, ready to respond to the last, very strong contractions aimed to birth the baby.

Levels drop steeply after birth, which may cause mother to feel cold or shaky. They don't go away though, and are known to contribute to instinctive mothering behavior.

BETA-ENDORPHIN

natural pain management

Beta-endorphin is present during sex, pregnancy, birth, and breastfeeding; it induces feelings of pleasure, euphoria, and dependency or, with a partner, mutual dependency.

Also a stress hormone, beta-endorphin is released under conditions of duress and pain.

During labor, high levels help a mother to manage pain and enter an altered state of consciousness (sometimes called "labor land") wherein she can get into the rhythm of her contractions and stay on top of her labor's intensity.

Beta-endorphin also facilitates the release of prolactin, which prepares the mother's breasts for lactation, and is present in breastmilk, inducing pleasure and mutual dependency for both mother and baby.

PROLACTIN

the mothering hormone

Prolactin is the major hormone of breastmilk creation and breastfeeding. Traditionally it has been thought to produce aggressively protective behavior (sometimes called the "mother tiger" effect) in lactating women.

Prolactin is also a hormone of submission or surrender, producing some degree of anxiety. In a breastfeeding mother, these effects help her to stay vigilant and put her baby's needs first.

Baby also produces prolactin while in the womb, and high levels are found in amniotic fluid. The function of prolactin in the baby is unknown.



BIRTH IS *natural.*

A laboring woman's body naturally produces a complex combination of hormones that take her outside of her usual state to guide her into and prepare her for motherhood safely.

This process unfolds best when birth is undisturbed.

Interventions that disrupt this process are best employed only when medically necessary.

Information in this infographic is derived from:
Ecstatic Birth: The Hormonal Blueprint of Labor, by Sarah J. Buckley
Mothering Magazine, Issue 111, March/April 2002