10 WAYS TO OPTIMIZE BIRTH HORMONES

oxytocin
the "love" hormone
"calm & connection"
causes contractions

endorphins
pain relieving hormones
"labor land"

catecholamines
stress hormones
"fight or flight"

prolactin
"mothering" hormone
facilitates breastfeeding

Have Skin-to-Skin Contact

Immediate, uninterrupted skin-to-skin contact with your baby causes a peak in maternal oxytocin that reduces the risk of postpartum hemorrhage and that promotes mother-infant bonding. It also causes a peak in maternal prolactin that increases the number of prolactin receptors and promotes breastfeeding. Fetal oxytocin elevations may promote a calm and alert state. Skin-to-skin contact reduces fetal catecholamines to stabilize the baby's heart rate and breathing and to reduce energy (food) requirements until breastmilk comes in. Mothers and babies should remain together, with frequent skin-to-skin contact and breastfeeding.

Let Labor Begin On Its Own

Both you and your baby will have the optimal number of receptors needed by your birth hormones to best facilitate labor and birth if labor begins on its own. Increases in fetal catecholamines in the last weeks and days of pregnancy will prepare the baby's lungs for air breathing after the birth. In animal studies, a surge of maternal oxytocin in the 24 hours around the spontaneous onset of labor is transferred to the baby via the placenta and protects the baby's brain from low levels of oxygen during labor.

Have a doula

If you are giving birth in a hospital, a doula may come to your home in early labor, providing support and encouragement so that you can stay home (where you are most likely more relaxed) until labor is active. At home, in birth centers, and hospitals the presence of a doula reduces catecholamines, which can slow labor. Doulas are also experts at non-pharmacological pain management strategies which promote the release of endorphins.

Choose a Health Care Provider Who Increases Your Confidence

Prenatal testing, emphasis on risks and dangers, and perfunctory prenatal visits can increase a pregnant woman's stress levels. Your healthcare provider should ease your concerns, answer your questions, and increase your confidence in your ability to grow and birth your baby. Both during pregnancy and during labor, she should also provide support and encouragement to help keep your stress level (and catecholamine levels) down.

Avoid Artificial Oxytocin (Pitocin)

Natural oxytocin is released in the brain (causing a "calm and connection response") and travels to the uterus (causing labor contractions). Artificial oxytocin (known as *Pitocin* in the U.S. and Canada) can cause contractions, but does not enter the brain to cause the "calm and connection" response. *Pitocin* administered over many hours can "fill up" oxytocin receptors and turn off natural oxytocin. This may eliminate the natural surge of oxytocin that occurs late in labor (known as the Ferguson Reflex), which promotes pushing efforts and the birth of the baby. Too much *Pitocin* in labor can also increase the risk for postpartum hemorrhage.

Give Birth in a Place Where You Will Feel Private, Safe, and Undisturbed

It is normal for catecholamine levels to rise gradually during labor, peaking during the pushing phase of labor. In an undisturbed birth, women may experience a powerful surge of catecholamines (called the "fetal ejection reflex") during pushing that helps them to birth their babies quickly. However, if catecholamine levels are too high and rise too quickly, oxytocin levels will decrease and labor can slow or even stop.

Skip (or Delay) The Epidural

Epidural analgesia decreases levels of both oxytocin, which causes labor contractions, and endorphins, which decrease pain and stress. Epidurals also decrease postpartum levels of prolactin, which facilitates breastfeeding. Learn and practice nonpharmacological pain management strategies. Most of these techniques such as a warm bath or shower, changing positions and rhythmic movements, and massage are thought to increase endorphin levels. If you do need an epidural, ask for immediate, uninterrupted skin-to-skin contact after the birth to increase the release of birth hormones that promote bonding, breastfeeding, and mothering activities.

Exercise During Your Pregnancy

Levels of endorphins rise during pregnancy and peak around the time of the spontaneous onset of labor. Women who exercise regularly throughout pregnancy have even higher levels of endorphins and shorter, less painful labors. Research also shows that regular exercise decreases the risk of cesarean surgery.

Practice Relaxation Strategies

Everyone has some stress in life. Low or an occasional moderate level of stress is called "eustress" and is considered normal and healthy. However, prolonged high or severe levels of stress are linked to premature birth, poor growth of the baby, and reduced newborn head size. Yoga and relaxation strategies taught in childbirth classes such as guided imagery, progressive muscle relaxation, and massage can reduce high levels of stress.

Give Birth Vaginally

Cesarean surgery interferes with the birth hormones in several important ways. However, a cesarean that is done after labor begins on its own has fewer negative effects on the hormonal physiology. If you know ahead of time that you will need a cesarean for medical reasons, ask that it be done after labor has begun on its own. Request immediate, uninterrupted skin-to-skin contact after the birth to increase the release of birth hormones that promote bonding, breastfeeding, and mothering activities.

References

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