The Role of Hormones in Childbirth

A relationship between a woman and a Doula is key to maintain harmony, continuity, support and trust. Their role is fluid, providing whatever is necessary for each individual birthing experience. Although almost always that role is simply to offer the gift of quiet presence.

'Think of birth as the most natural process, an instinctive act an elaborate pattern of actions that happens and if you will allow your body and mind to accept the journey you will have a positive and gentle birth'

Knowledge is power and as I help you explore and learn the vital role hormones will play during your pregnancy and labour. It will give you a greater understanding of the physiology during this new and exciting chapter you are to embark on. The beauty of your pregnancy and labour is something so unique, to allow yourself to embrace the immense role each individual hormone play in facilitating your pregnancy, labour and after your baby is born will empower you and help you take control of your body, your pregnancy and your birth.

Free yourself from the idea of pain relief

For the importance of these hormones are the key to your pregnancy and labour

To discover and learn about each hormone and the amazing role they play in the human body will allow you to respect and value them. In turn it will liberate and empower your pregnancy and birth.

You and your baby are born with the ability to start labour, labour and give birth, breastfeed and organically create a bond so powerful and wonderful. The flow of hormones in your body drives these finely tuned processes.

It is important that you and your partner understand how to work with them, and avoid disrupting these processes.

While you don't need to be taught how to give birth, to learn about the amazing capabilities of women and newborns. When a woman feels confident in her body and thoroughly supported and able to voice her wishes without fear this will in turn allow you respond intuitively without inhibitions cope with the birthing process

The Role of Birth Hormones

Birth hormones are like "messengers" that your body makes. Your baby also makes hormones. These hormones work together to help important changes in your body, changes that encourage pregnancy and birth go smoothly and safely for both of you. Birth hormones help guide you and your baby in many ways, including:

- Getting your body ready to give birth
- Starting your labour contractions
- Preparing your baby for labour and life outside your body
- Preparing your breasts and getting baby ready to breastfeed

And when you and your new baby fall in love, birth hormones are part of those feelings, too!

Here are the hormones that will become your best friends during labour, Oxytocin, Endorphins, Adrenaline, and Prolactin. These hormones play a major role in regulating labour and birth. Decisions you make about your care can support or disrupt the way hormones work, so understanding how they work and how they are affected is important for making informed and educated decisions.

Oxytocin

Oxytocin is also known as the "hormone of love" because it is involved with lovemaking, fertility, contractions during labour and birth and the release of milk in breastfeeding. It helps us feel good, and it triggers nurturing feelings and behaviours. Your body to responds to oxytocin gradually in pregnancy and then increases a lot during labour. Oxytocin stimulates powerful contractions that help to thin and dilate the cervix, move the baby down and out

of the birth canal, push out the placenta, and limit bleeding at the site of the placenta. During labour and birth, the pressure of the baby against your cervix, and then against tissues in the pelvic floor, stimulates oxytocin and contractions. So does a breastfeeding newborn.

Low levels of oxytocin during labour and birth can cause problems by:

- Causing contractions to stop or slow, and making labour take longer.
- Resulting in excessive bleeding at the placenta site after birth.
- Leading health care workers to respond to these problems with interventions.

You can promote your body's production of oxytocin during labour and birth by:

- Staying confident, comfortable and calm
- Creating a familiar and safe environment, an undisturbed birth can create a more secure space for mother
- Staying upright, moving around squatting will allow gravity to help baby more easily
- Stimulating your nipples or clitoris before birth, and giving your baby a chance to breastfeed after birth.

Endorphins

When you face stress or pain, your body produces calming and pain-relieving hormones called endorphins. You may have higher levels of endorphins near the end of pregnancy. For women who don't use pain medication during labour, the level of endorphins continues to increase steadily and steeply through the birth of the baby. The higher the endorphin levels during labour and birth this can produce an altered state of consciousness that can help you deal with the process of giving birth, even if it is long and challenging. High endorphin levels can make you feel alert, attentive and even euphoric after birth, when you get to meet your baby for the first time. In the early post birth period, endorphins are believed to play a role in strengthening the motherbaby bond. A drop in endorphin levels at this time may contribute to the "blues," or postpartum depression, that many women experience for a brief time after birth.

Low levels of endorphins can cause problems in labour and birth by:

- Causing labour to be excessively painful and difficult to tolerate.
- Leading health care workers to use interventions.

You can enhance your body's production of endorphins during labor and birth by:

- Staying focused, alert, comfortable and confident.
- Avoiding disturbances, such as unwelcome people or noise and uncomfortable procedures.
 - Delaying or avoiding any pain relief or intervention.

Adrenaline

Adrenaline is the "fight or flight" hormone that we produce to help ensure survival. Women who feel threatened during labor such as fear or severe pain, may produce high levels of adrenaline. Adrenaline can slow labour or stop it altogether.

Too much adrenaline can cause problems in labour and birth by:

- Causing distress to the baby before birth.
- Causing contractions to stop, slow or have an erratic pattern, and lengthening labor.
- Creating a sense of panic and increasing pain in the mother.
- Leading health care support to respond to these problems with alternative interventions.

You can keep adrenaline down during labour and birth by:

- Staying calm, comfortable, secure and relaxed.
- Being informed and prepared.
- Having trust and confidence in your body and your capabilities as a woman.
- Being in a peaceful and private atmosphere and birthing in a familiar environment, a dimly lit room calm music, candles, positive energy, nuturing support and physical touch
- Being with people who can provide comfort and reassurance, positive words and other support
- Avoiding intrusive, painful, disruptive procedure

Prolactin

Prolactin is known as the "mothering" hormone. Released from the pituitary gland during pregnancy and breastfeeding. Its role increases during pregnancy, helping mum to organize her brain for her maternal role, it peaks when labour starts on its own. Continued prolactin production during and after labour is preparing a woman's body for breastfeeding. It also plays a role in moving labour along and helping your baby to adjust to life outside the womb. Prolactin is key to breast milk production. High levels of prolactin with breastfeeding, supports a woman's instinctive maternal role. After breastfeeding mothers are known to be calmer this can be due to peaks of oxytocin and prolactin combined.

Low levels of prolactin may cause problems through:

- Breastfeeding confidence
- Baby and Mother bonding
- Poorer adjustment of a woman to motherhood.

You can likely promote your body's production of prolactin by:

- Allowing labour to start naturally
- Keeping stress during labor and after birth to a minimum
- Keeping mother and baby together after birth. Skin to Skin
- Breastfeeding when baby is born. Skin to skin

Maximizing the Role of Birth Hormones

As you can probably tell from the information above, some features of typical hospital childbirth settings, like noise or medical interventions, can interfere with your body's natural processes. To avoid this and maximize your body's ability to follow its natural processes, it's a good idea to seek out a birth setting that supports this. Out-of-hospital, such as Birth Centres or Home Births with one-on-one continuous support, such as doula care, can help create conditions that enhance your body's natural production of helpful hormones and keep hormones at peace.