



days and weeks benefits moms mental health via oxytocin and prolactin peaks which are both stress reducing.

When we interact with our babies by holding, carrying, touching, talking to and breastfeeding, we are rewarded with the release of oxytocin, endorphins and prolactin, which give us pleasure by activating the pleasure centres in our brains. The more pleasure we get from interacting, the more we want to be with our babies, which benefits their health and development.

#### Encourage the hormones to dance – the Dance of Normal Birth

- Learn the steps. Attend childbirth education classes and learn how the body functions and fully understand labour
- Practice coping strategies, visualisations, affirmations and confidence building
- Assign support roles. Create a birth dance friendly environment, choose dance instructors – the role of support in normal birth, doulas, female support (bringing oxytocin to the birth), preparing or holding the space, carrying and lifting
- Labouring (Dancing). Accepting the sensations of birth, feeling the rhythm, moving to the beat of labour, using the space, finding the path using relaxation, rhythm and ritual and preserving the natural hormonal benefits.

### Our Amazing Birthing Body – the Perfect Dance of Birthing Hormones

Ensure you attend Childbirth Education classes. Find your childbirth educator today and learn more about classes so you can truly make informed decisions about your pregnancy, birth and parenting experiences



[www.expectantmothersguide.co.za](http://www.expectantmothersguide.co.za)

### Childbirth education classes

Birth is a day you will never forget. A day that will change everything and everyone around you forever. It transforms you into a mother, your partner to a father, your parents to grandparents, your siblings to aunts and uncles. Prepare well for it by attending childbirth education classes.

Gain knowledge. Know your options. Evidence based information. Dad's role. Informed decision making. Questions on all aspects of pregnancy, labour, birth and parenting. Vaginal births. Caesareans. Gaining insight. Breastfeeding. Options. Informed choices. Skin-to-skin at birth for all moms and babies. Microbiomes. Self-help techniques.

The philosophy of the childbirth educator should be freedom of choice based on the knowledge of alternatives.

Some important questions to ask the educator are:

- What are her qualifications? Has she a medical background? Is she a midwife and delivered babies so she understands birth? Has she specialised in childbirth education? Is she a SACPE or ICCE – the designations for a specialist in childbirth education.
- Does she attend regular Childbirth Educator Professional Forum educational updates?
- Is she a mother herself?
- What are her ideals of labour – do they match your ideals, expectations and desires for your labour?
- Do partners attend all the classes or only a select few?
- Are there practical sessions on breathing, positions for labour, massage, relaxation and visualisation?
- Which birthing methods are included in her course?
- Is she an independent practitioner and so has the freedom to teach in an unbiased manner or is she employed by a hospital or a gynae to teach what they have decided you should know and not all the options available?
- Which birthing method does she put her emphasis on during her teaching? – It is very important that her emphasis should be the birth you are striving for, but she should cover all birthing options
- Length of course – be wary about crash courses. Rather attend a comprehensive course of 6+ sessions



Guidelines from the American College of Obstetricians and Gynecologists

## The Perfect Dance of Birth Hormones

Our amazing birthing body working in perfect synchronicity!



“The hormones that make birth happen, also prepare us for breastfeeding and mother-infant attachment” – Dr Sarah Buckley





Our birthing hormones are critical to actually making labour and birth happen! In addition, our hormone systems prepare us in the final weeks, days and hours for an efficient labour and birth, help with labour pain and stress, ensure a safe birth for our babies and, after it is all over, give us a feeling of reward and pleasure as we meet our

baby for the first time. But for all this to happen in perfect harmony – to work the most efficiently – the birthing hormones need to work together in perfect synchronicity.

### So how do we achieve this perfect dance?

Our birthing hormones are made up of 4 main hormones

- Oxytocin – the Love hormone
- Endorphins – the Pain-relieving hormone
- Catecholamines – the Stress hormones – the fight or flight hormones
- Prolactin – the Mothering hormone that facilitates breastfeeding

## Pregnancy

When we are pregnant we need to choose a kind, caring health-care professional who will create a supportive environment for pregnancy and birth. They need to answer our questions, allay our fears, be supportive and encouraging, increasing our confidence in our own ability to grow a baby and birth it.

It is important to attend childbirth education classes where our increase of correct knowledge can allay our fears and give us the confidence to trust our bodies to birth correctly. It will also give us the understanding of this perfect dance of birthing hormones we need in order to achieve the best outcome for mom and baby at birth.

This kind supportive environment will decrease pregnancy stress which decreases the release of our catecholamines – our stress hormones – which cause us to fight or take flight.

Exercise during pregnancy prepares our body for labour as well as generating higher levels of endorphins which will lead to a shorter, less painful labour. Research also shows that regular exercise decreases the risk of needing a caesarean.

Slight increases of catecholamines in the last few weeks and days

of pregnancy causes the foetal lungs to mature preparing the baby's lungs for breathing after birth as well as maturing other foetal organs.

## Labour

The hormones of mom and baby are interrelated and work in synchrony together to get the best outcomes for both mom and baby. What mom is exposed to during her pregnancy, labour and birth will influence what effects she experiences during this time, which goes on to effect the hormonal balance of the foetus and baby. They are totally interconnected – mom and baby can't be separated. They promote and inhibit each other's hormonal activity and dance.

Let labour start on its own. The hormones will set up the perfect labour synchronicity for you.



Birth in a safe, private, relaxed atmosphere to keep your stress hormones and the balance of hormones dancing perfectly. With the onset of labour, increases in oxytocin and prostaglandins will cause the uterus to supply effective contractions for labour. Endorphins prepare for pain relieving pathways. An increase in oxytocin prepares for breastfeeding and maternal-infant bonding. Maintain

a calm, low stress, supportive environment in labour, as this lowers the levels of the catecholamines so labour isn't slowed down by the wrong hormones interaction. Good labour support by a doula or birth companion helps lower stress levels so mom will be more able to cope with pain and not need an epidural. Lower levels of stress promotes uterine blood supply, improving foetal circulation and newborn well-being.

Eustress – is the name for a healthy level of stress. Slightly increased catecholamines let mom remain alert and focused during labour. Short term foetal catecholamines also increase in late labour which protects the foetus from hypoxia (low levels of oxygen) and promotes the transition of breathing, temperature and glucose levels. It also promotes newborn alertness which benefits breastfeeding and maternal-infant bonding. Too much stress causes high catecholamine levels which cause blood to flow away from the uterus and baby. This is the classic fight or flight response which causes labour to stall.

Use your relaxation techniques taught to you at childbirth education classes to keep you relaxed and with low stress levels. Relaxation, guided imagery, and massage are wonderful tools to help keep this balance in place. Use non-pharmacological pain relieving methods like water, positions and massage. This promotes the release of endorphins

– the natural pain relieving hormones. Movement and upright positions also enhance endorphin release (this is also known as a runners high). In late labour, oxytocin peaks and assists with the pushing stage of labour. If mom is stressed, the catecholamine increase will disrupt labour by lowering the oxytocin levels.

### Cascade of interventions

If mom has an epidural, her oxytocin levels drop, which can lead to synthetic Pitocin being given to counteract this effect. Prolonged use of Pitocin blocks the real oxytocin receptors and increases the mom's risk of postpartum haemorrhage (excessive bleeding after birth).

Women who give birth vaginally release oxytocin more effectively and sooner than women who have a caesarean.

## Skin to skin

Mom and baby being skin to skin immediately and uninterrupted after birth, increases mom and baby oxytocin levels which supports breastfeeding success and enhances maternal-infant bonding as well as decreases the risk of postpartum haemorrhage.

Following birth, stress levels decrease, the catecholamine levels decrease which allows the increases in oxytocin and endorphins – the calming and rewarding hormones. Mom views birth as more positive because of this. Oxytocin is released by stimulation of sensory nerves. As a new baby crawls on its mothers chest so this activates sensory cells in the skin to produce more oxytocin.



Early initiation of breastfeeding promotes the release of calming, rewarding hormones for mom and baby. The first breastfeed calms the baby after being born. Prolactin levels increase which facilitates breastfeeding. Baby's oxytocin increases with skin to skin which promotes a calm and alert state and facilitates breastfeeding. Uninterrupted skin to skin increases

oxytocin and prolactin levels thereby promoting breastfeeding. Skin to skin promotes moms vasodilation (blood vessels dilating), particularly on mom's chest and hence warms the baby.

Skin to skin reduces newborn stress and stress hormones, improving energy consumption, glucose levels, breathing, crying and breastfeeding behaviours. Ongoing skin to skin during those early