

SYMPHONY OF HORMONES IN LABOR

A guide to understanding and supporting biological birth

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NTRODUCTION



WELCOME

A woman's body in labor is in a primal state of biological flow.

The more a woman understands and aligns her environment and mind with this synergy of nature, the more her body can work with the natural flow of biology to birth her baby in the most gentle, non-traumatic and loving way.

STARTING MEDITATION

Become aware of your own body, sounds and sensations. Have you just eaten or had a drink? It is being digested? Your heart is beating. Your skin is feeling. And for those pregnant your little baby is growing, forming and moving perhaps. Also heart beating, skin feeling and ears hearing.

Become aware of how you are feeling in your body.

Are you relaxed?

Where do you feel tight or tension?

Do a scan of your body. From your head, face, shoulders, top of your back, your chest, tummy, pelvis, middle of your back, lower back, buttocks. Genitals, thighs, calves and feet.

Are you holding any tension?

Send yourself a hug, a warmth, a reassurance and consciously relax your body.

Send your baby within a message of love and connection.

Open your eyes.

I invite you to put your hands on your belly.

Close your eyes for a moment and take a deep, slow, conscious breath in – filling very deep and slowly... and then releasing very slowly.

A MOTHER IN LABOR

IS PRIMAL.

Her body is working and her mind cannot control it.

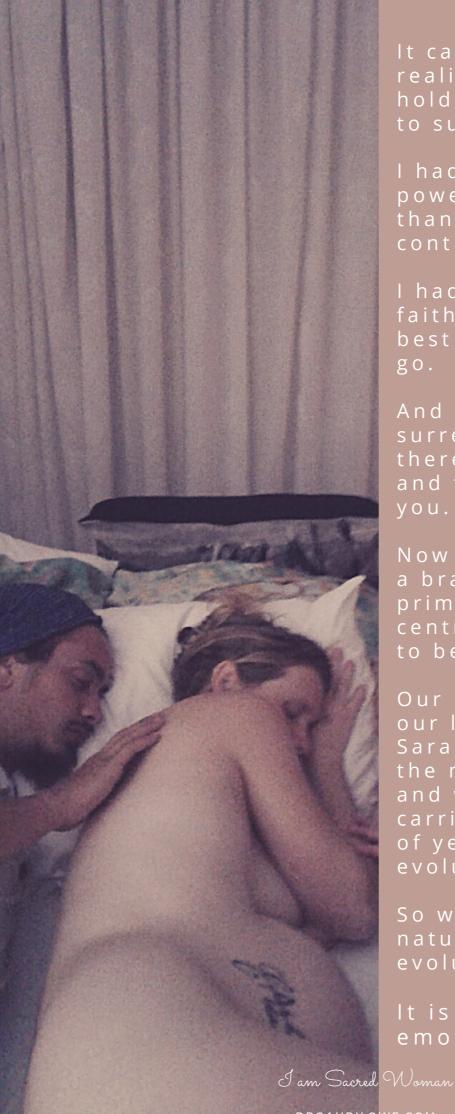
It is involountary, natural and It REALLY DOES WORK!

The more we can do to support this biological process and provide an environment that it needs – the more we can surrender to the power of labour.

And the better it can work.

There was a time in preparing for this talk – when I was holding on very tightly – my body was feeling very tight, I was stressing and trying to have everything in my control so I could know exactly all the details.





It came to a point when I realised how I was holding it and that I had to surrender.

I had to surrender to a power that is greater than me and IS in control.

I had to surrender with faith that I can try my best and then I must let go.

And when you surrender with faith - there is a powerful peace and trust that comes over you.

Now for labour and birth a brain needs to go primal. Our primal centres of our brain need to be acting.

Our primal centres are our limbic areas which Sarah Buckley explains as the mammalian brain – and which have been carried through millions of years of natural evolution.

So we are at the prime of natures reproductive evolution!

It is our instinctual and emotional brain.

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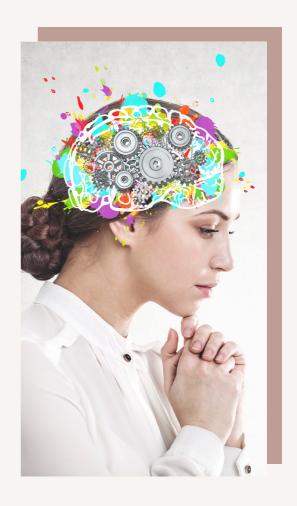
The cerebral cortex which – you are using now – is rational, intellectual, alert, calculating, answering, sorting and organising.

Our cerebral cortex is switched on by bright lights, answering questions, swift assertive actions, loud, sharp noises, defending ourselves – making ourselves feel safe, thinking!

Our cerebral cortex needs to shut down in labour.

Labour is a primal activity. If you want to feel organic, natural, in a pulse and rhythm with the core and divinity of nature – go into labour.

That was the most striking memory of my first birth. The absolute connectivity with the deep core of nature in its absolute essence!



There is a lot of fear about birth from so many sources. Birth stories, media, mothers, aunts, doctors!

We can consciously replace the fear we hold or that comes up with a deep faith in the process of labor and in our bodies to fully go into that process.

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Even the timing of labour is a big debate and as the time comes closer, we can become more anxious. If the time passes – we become even more anxious!

So faith, surrender and trust that your baby will come when he/she is ready AND allowing your body, giving your body permission, going inside and addressing any anxieties, stresses, doubts you may be harbouring will facilitate your body going into labour at the perfect time.

Labour is a dance – with you and your baby. The hormones that facilitate labour are the orchestra – together making a perfect symphony.

And making you dance!

And making your baby dance!

We cannot birth our babies through sheer force of will. We need to learn the more subtle, the equally powerful, path of surrender.

- Dr Sarah J Buckley



SYMPHONY OF HORMONES IN LABOR

OXYTOCIN

The lead hormone in the dance of labor

OXYTOCIN

Oxytocin is also known as the hormone of love, the shy hormone and the moral hormone.

Oxy means fats. Tocin means labour.

Oxytocin is the main hormone governing labour, however it doesn't only act on the uterus (womb) during labour.

It is excreted in times of pleasure for example enjoying a pleasant meal, in good company, sexual pleasure, breastfeeding and in labour.

During pregnancy oxytocin helps with decreasing stress reactions (hence the name "chilled out hormone") and reserves our energy during this time.

In birth it is released in pulsations. So you feel surges or waves of contractions - that come and go.

The oxytocin receptors on the uterus increase during pregnancy and in labor

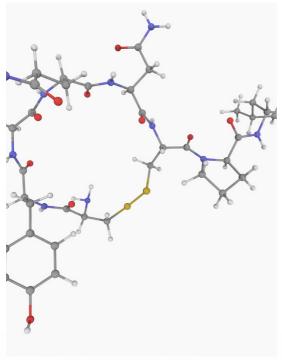
When the circulating oxytocin increases. It causes uterine contractions.

There is a positive feedback loop. When oxytocin is released there is fetal descent (baby moves downwards) and this stimulates the stretch receptors which in turn feedback to oxytocin to increase it.



OXYTOCIN

SYMPHONY OF LABOR



After birth oxytocin continues to be excreted and this plays a part in contracting the uterus, which in turn prevents postpartum bleeding.

I have described some of the local uterine actions of physiological oxytocin.

The generalised actions are those that the names for the hormone describe.

A feeling of wellbeing, pleasure, love and empathy.

It is involved with instinctive mothering behaviour as described later.

Its first action is as a hormone of love then on the uterus.



OXYTOCIN

The first hour after birth is when oxytocin peaks. This is one of the reasons this hour after birth is SO important.

Skin to skin and eye to eye contact with your baby enhance the action. It also helps with the ejection of breastmilk and is secreted in the breastmilk too.

The babies brain also secretes oxytocin for about 4 days. after birth.

These events and the physiological flow of oxytocin are SO important that in an experiments with rats with no oxytocin they birthed but did not breastfeed.

Oxytocin is inhibited by stimulation of the cerebral cortex.

The parallels between making love and giving birth are clear, not only in terms of passion and love, but also because we need essentially the same conditions for both experiences: privacy and safety.

- Dr Sarah J Buckley

his includes bright lights, loud noises, strange people, any invasive procedures. These signal a sense of danger or alert to the mom on an absolute primal level switching on the cortex.

It stimulates adrenalin, which has a place later in labour, but at this point inhibits oxytocin release.

Alternatively we can find out more about what does support oxytocin release.

I am Sacred Woman



To enhance oxytocin release we want to do things that support a sense of love, pleasure and maternal instincts.

We use dull lights, speak softly and sweetly, limit invasive procedures unless absolutely necessary, limit who you want at your labour and be restrict intrusions.

If you want to stimulate oxytocin naturally, have a LOVERLY kiss with your partner or stimulate your nipples.

Feeling safe, secure, comfortable and relaxed in your environment are very important aspects of a physiological birth.

It allows you to to surrender. To leave your cerebral cortex and allow your instincts and faith to rule and flow.

And in labour we have surges. I am sure you have heard them referred to as contractions.

The surges come and come and come, coming to a crescendo and then release and go and then come and come and come again - and then go.



During pregnancy we may become more emotionally sensitive, more easily triggered, more intuitive, more weepy and labile. It can be quite difficult and for those around you.

I do believe that in those sensitivities we can find a wisdom speaking to us about our personal growth journey – what we may need to work with, deal with, process and release.

So that we can fully trust and follow the inherent wise and natural flow of labor.

A PRACTICE

Take 5 minutes to free flow wrote who you would like to be in your birthing room.

Also write down what makes you feel safe, loved, heartopen and held?

These are important reminders for how to support your physiological birth.

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SYNTOCINON

Syntocinon is the synthetic chemical version of oxytocin that is given at the hospitals to intensify or give uterine contractions in labour.

It does not have the same generalised affect as oxytocin and is not delivered in the same physiological pulsations as oxytocin.

There is some research supporting negative inhibitory affects on the body's natural secretion of it's own oxytocin too.

In a hospital setting it is given via a drip (iv line) to induce or augment labor. And injected into the mother's thigh at the birth of her baby for active management of the placenta.



SYMPHONY OF HORMONES IN LABOR

ENDORPHINS

Our body's natural analgesic

ENDORPHINS

If allowed to flow naturally oxytocin works syynergistically with endorphins.

This allows a slightly altered state of consciousness that assists the mother to follow her instincts during labour and birth.

It is also a family of the opiates of which morphine and pethidine belong. It is the bodies natural painkiller or analgesia.

It is also involved in the minds reward systems, which enhances a sense of pleasure, dependency, and euphoria.

It disinhibits which goes in hand with a sense of altered consciousness that.

allows a women to follow a natural process of her body in labour, transcending pain.

Working synergistically with the other hormones of labour it peaks at birth with quantities compared to a marathon endurance athlete.

And stays peaked for 3 days.

It is also secreted during breastfeeding to continue a reward pleasure feeling for mom and baby.

As you can often see on a babies face after breastfeeding known as milk-drunk.

So by knowing and understanding more about a physiological birth and how

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SYMPHONY OF HORMONES IN LABOR

how we can prepare and support our body, our natural endorphins kick in.

There are different things we can do to assist that.

Being warm.

You cannot labour if you are cold.

Feeling good and safe with people around you.

Being able to fall asleep and rest and relax and move around, take any position as you need to.

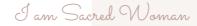
Being able to vocalise, scream, shout, swear, grunt as you need to.

I am generally a quiet person. In my labour I screamed. I think in the last hour – I screamed with every contraction. And then I would apologise in between.



I feel I needed to release some deep grief I had experienced in my pregnancy that I had almost not been able to process fully because I had wanted to protect my baby.

I was absolutely aware that I needed to let that contraction come through and out of me by opening my mouth and letting sound out!



ENDORPHINS

SYMPHONY OF LABOR







Pelvic Floor

Sound is an extremely vital part of birth for many people.

Many videos show someone breathing and blowing out there baby or through the contractions.

But just physically feel – purse your lips, make your mouth tight – and your vagina, your pelvic floor muscles will become tight.

By allowing your mouth to be soft, loose, open it helps to keep your vagina and pelvic floor open, soft and flexible.

And then from this somberlescent, relaxed and altered state – literally suddenly - A mom will be alert! Awake! Wide-eyed! Sitting up!



ENDORPHINS

And uuuuuuuuuhhhhhhhh your body is PUSHING.

Not you.

You are not sitting there thinking oh, should I push and forcing your muscles to push as someone is coaching you.

No – your body is lurched into a grand powerful primal PUSH!

SYMPHONY OF HORMONES IN LABOR

ADRENALIN

at the right time

ADRENALIN



Naturally these hormones rise gradually and peak in transition just before the baby is born.

They function to protect the mother in situations of sensed danger or threat and are therefore known as the fight or flight hormones.

Conceived threat like imminent harm, anger, anxiety, hunger or cold these hormones work together to reduce blood flow to all organs like the uterus and send blood to where the woman can use them to flee.

It also acts to protect animals who are birthing in the wild and want to protect their young.

their labour won't continue if predators are present, so the mother can flee or wait for safety.

It is a primitive reflex which often explains why a woman's labour can simply stop on arrival at the hospital, on an examination or another threatening situation.

Any feeling of not being safe, not being supported, feeling anxious or scared, feeling invaded or having her rights violated will evoke fear hormones that negatively impact the flow of labor.

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ADRENALIN

At the perfect time, at transition (when the baby is descending and the cervix is dilated), adrenalin acts together with the other hormones perfectly to produce the fetal ejection reflex.

Which is experienced as involountary pushing. This is an important concept that follows a biological labor and results in birthing your baby (pushing baby out).

After birth adrenalin decreases rapidly and is one of the reasons a mom may feel cold and shaky and must be kept warm. (So as not to stimulate adrenalin at this time.)

The baby also benefits from the adrenalin surge being born with eyes open and alert while the sudden decline afterwards conserves precious energy resources. It helps to stimulate breathing and increases absorption of fluid from the lungs.



PROLACTIN

The Mothering hormone

PROLACTIN

The hormone of tender mothering.

Involved in breastfeeding.

Progesterone blocks prolactin during pregnancy but once the placenta is delivered, prolactin surges.

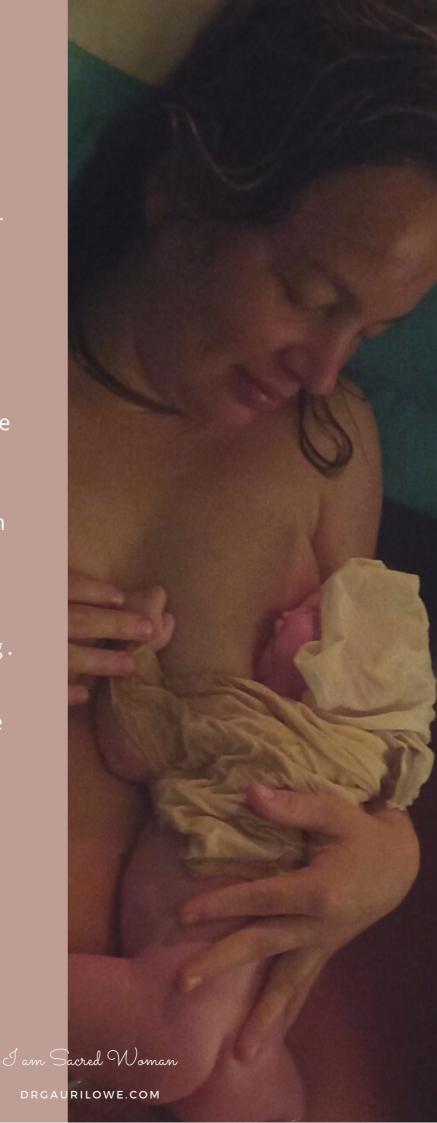
Prolactin is involved in producing breastmilk.

It is an important hormone in maternal behaviour and bonding.

It enhances maternal protection towards the baby and putting the baby first!

It is the maternal hormone involved in breastfeeding, maternal bonding and protecting.

It is increased with frequency of breastfeeding with a good latch!



PROLACTIN

And it helps create the space following breastfeeding – calm, elevated mood, increases resistance to stress.

Prolactin is found to be increased in fathers who carry their newborn and become more sensitive to their needs.

As we stare at our new baby and soak her or him in, our eyes locking as she can focus on your face when she is on your breast, stimulating release of prolactin.

Lying together skin to skin, not looking at our phone, being present and attentive to our baby supports prolactin release.

Prolactin release supports breastmilk production and breastfeeding.

The best way to support prolactin is nipple stimulation

Prolactin is an important factor in the occurrence of paternal care and thus deserves the label "hormone of paternity." In combination with its role in maternal care, it might in fact more properly be called the "hormone of parenthood."

- Prolactin, the Hormone of Paternity by Carsten Schradin and Gustl Anzenberger

as during breastfeeding.

Prolactin also supports oxytocin release after birth to contract the uterus (balances postpartum bleeding) and bonding with baby.

Together the hormones work synergistically at the right time to support our natural biological health as well as bonding and emotional wellness.



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IN CONCLUSION

The importance of conscious birth is not only about knowing about the orchestra of the hormones but how to access it?

How to become fluid like water, to let emotions flow, to disengage and disempower emotions that are causing a haze, that are obstructing our integrity to access our inner nature and healing power.

Our inner feminine which is a part of a universal power.

This is also the work of pregnancy. Introspecting and clearing our emotional landscape!

The emotional presence of pregnancy, labour and birth – can we enter and find what sustains us from the inside?

Can we enter our state of complete trust with our body and nature that is will do what nature intended?

The symphony of these 4 hormones together lasts beyond the birth of your baby.

During childbirth a woman reaches for the cosmic Mother in the Stars while deeply rooting into Mother Earth below.

Here She is perfectly guided and held.

- Dr Gauri Lowe



A FEW GREAT RESOURCES

click on the title to take you to the articles or videos

<u>Love cocktails during Labor</u> - Dr Michel Odent

Fetal Ejection Reflex - Dr Michel Odent

Birth as We Know It - Birth into Being

<u>Hormonal Physiology of Childbearing - Dr</u> <u>Sarah Buckley</u>

What is a Phyiological Birth - Marianne Littlejohn

15 differences between home and hospital birth that they don't tell you

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A LITTLE ABOUT ME

I had my first son at home when I was in medical school. I was shocked by the difference in personal and clinical approaches to my amazing homebirth experience and how I was being trained as a dr.

I made it my mission for the last 17 years to stand up for maternity rights in childbirth.

My research and experience has led me to know that our birth experience lasts forever and has an affect on our children and our lives.

I have dedicated myself to Reframing Women's Healthcare with a Sacred Feminine Wisdom approach - so women can know and access the care they need.

I teach women to support women during birth and postpartum online and locally.

I live in rural India with my husband and 2 sons.





STAY CONNECTED!

<u>INSTAGRAM</u>

BOOK A 30 min CHAT (ask any questions, prepare for labor)

RECEIVE NEWSLETTERS