

How to **HARNESS** the

HORMONES OF BIRTH

for an *easier, less painful*, and
more *enjoyable* birth

With:

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INTRODUCTION

Hello and welcome to my ebook: How to harness the hormones of birth.

My name is Esther Croft and I am so excited to share this information with you. By the end of this ebook you will:

- Know how each of the four main hormones of birth work
- Understand how to harness the power of these hormones
- Know what to avoid
- Have a plan for putting all of this knowledge into action.

What is covered in this guide?

In this guide we will discover the four big players in the world of birth hormones:

- Oxytocin
- Catecholamine
- Beta Endorphin
- Prolactin.

For each hormone, you will learn: what it does, how to harness it, and what to avoid.

If you want to know more about gentle childbirth, or how HypnoBirthing can help you harness these amazing hormones, please do look around [my website](#). You may be particularly interested in these blog posts:

[Ten reasons to take HypnoBirthing classes](#)

[What does a HypnoBirth feel like?](#)

[Three simple steps for easier natural birth](#)

[Seven unexpected benefits of HypnoBirthing classes](#)

So let's begin with the first of the big four. Oxytocin.

OXYTOCIN

Oxytocin is known as the ‘hormone of love’ because of its role in social behaviours, lovemaking, and bonding

What does oxytocin do?

Oxytocin plays a major role in childbirth, including causing rhythmic contractions of the uterus. These contractions serve a number of purposes, including:

- Thinning and opening your cervix
- Nudging your baby down the birth path
- Ejecting the placenta
- Closing off the blood vessels to the placenta.

Oxytocin has a natural pain relieving effect and also helps to create the altered state of consciousness that allows you to go into your birthing zone and let your body do as nature intended.

Levels peak after the birth to promote bonding and loving feelings. This boost is not just for mothers and babies either, research shows that fathers and midwives can also receive a boost of oxytocin after the birth – making for a very loving atmosphere.

The oxytocin in your system turns on instinctive mothering behaviours and increases your responsiveness and protectiveness towards your baby.

Oxytocin also contributes to the let down reflex in breastfeeding which is responsible for allowing milk to be released. In conjunction with beta-endorphin, it also activates the reward-centre of the brain during breastfeeding, which is associated with dependence and addiction, creating a positive sense of mutual dependency between you and your baby. This lovely hormone also keeps you feeling calm and content as long as you continue breastfeeding.

How can I harness oxytocin?

To harness oxytocin, it's important to make sure levels are nice and high during birth, immediately after the birth, and beyond. Promoting oxytocin will help strengthen your surges for a faster, more effective labour, reduce post-partum-haemorrhage, and strengthen bonding.

Oxytocin receptors in your uterus increase over the course of the pregnancy, so the first step is to wait until your body is ready to begin labour so that the oxytocin being released is ready to be received. Other ways to increase your oxytocin during the labour include:

- Feeling safe and unobserved
- Dim lighting
- Nipple stimulation
- Orgasm
- Light touch massage
- Being in an upright position.

After the birth you can also help increase your oxytocin levels by:

- Having skin-to-skin contact with your baby
- Eye contact with your baby
- Breastfeeding.

What should I avoid?

Interfering with oxytocin can slow down or stall your labour, disrupt bonding, and increases the risk of post partum haemorrhage.

Oxytocin disruption has also been tentatively implicated in schizophrenia, autism, cardiovascular disease, and drug addiction.

Things that interrupt natural oxytocin levels are:

- Fear and feeling unsafe
- Feeling observed
- Bright lights
- The use of synthetic oxytocin (pitocin or syntocinon) – drugs used in inductions and also sometimes to speed up a labour that has slowed (known as labour augmentation)
- Epidurals and other pain relief medication
- Invasive/uncomfortable procedures (vaginal exams etc.)
- Non-essential caesarean sections*.

*Caesarean sections feature on the 'what to avoid' list for all of the birth hormones. In a medical emergency the benefits will obviously outweigh the downsides. The good news is that there are many steps that are proven to help reduce the likelihood that you will need a caesarean including:

- Exercising moderately during your pregnancy
- Selecting a care provider with a low caesarean rate
- Having a doula (professional labour support)
- Preparing with HypnoBirthing classes
- Avoiding pain medication
- Staying active during your labour.

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BETA-ENDORPHIN

Beta-endorphin is your body's own natural pain-killer. It acts in a similar way to morphine or pethidine

What does beta-endorphin do?

During pregnancy beta-endorphin suppresses your immune system, possibly to stop it from rejecting the foreign genetic material of your baby.

It also promotes prolactin development and release, which prepares breasts for breastfeeding and contributes to the lung maturation for the baby.

Beta-endorphin has pain relieving properties that are between 40 and 200 times stronger than morphine which makes for a much more comfortable labour when this hormone is working its magic.

In addition to pain relieving effects, beta-endorphin promotes feelings of pleasure and euphoria during labour and contributes to the transcendent experience, allowing you to go into your own birth zone and distance yourself from the physical sensations of labour.

After the birth it helps the mother feel alert and attentive to the baby.

Beta-endorphin is important for a breastfeeding relationship, too. Beta-endorphin released during breastfeeding helps you to feel calm and relaxed. Alongside oxytocin, it activates the reward-centre of your brain during breastfeeding, which is associated with dependence and addiction, creating mutual dependency between you and your baby.

The presence of beta-endorphin in breast milk is also thought to enhance the growth of certain brain cells in your baby.

How do I harness beta-endorphin?

Promoting beta-endorphin will reduce pain for a more comfortable labour, strengthen bonding, and support a strong breastfeeding relationship.

To harness the positive powers of beta-endorphin, it is important to promote high levels during birth, immediately after the birth, and while breastfeeding.

Effective ways to promote beta-endorphin include:

- Choosing a birth environment and support team to help you feel calm and safe during labour
- Avoiding induction/augmentation of labour
- Avoiding epidural/pain relief medication
- Avoiding caesarean sections
- Light touch massage
- Using a birth pool or bath
- Breastfeeding.

What should I avoid?

Low levels of beta-endorphin cause excessive pain during labour and can reduce the reward system that encourages mutual dependence and bonding between mother and child.

In order to keep high levels of this hormone, the following should be avoided where possible:

- Epidural - these greatly reduce the release of beta-endorphin, during the labour, and during breastfeeding
- Other pain relief medications
- Non-essential caesarean sections
- Bottle feeding.

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CATECHOLAMINES

Catecholamines are the stress hormones responsible for the body's fight-or-flight response

What do catecholamines do?

'Catecholamines' is the collective term for the hormones epinephrine and norepinephrine (also known as adrenalin and noradrenalin). They are produced in response to fear, pain, hunger and cold.

In early labour catecholamines slow down and inhibit labour, while later on they play an important role in assisting your baby's descent.

If catecholamines are present in early labour, the 'fight or flight' response is activated and your labour will slow or even stop completely. Essentially if your body senses danger it stops the labour so that you can get to safety to resume your labour.

The physical effects of high levels of catecholamines in early labour are:

- Inhibiting your contractions, causing them to slow, become erratic or even stop
- Creating a sense of panic
- Increasing the physical pain you feel with each contraction
- Causing distress to your baby.

Around the time of transition (when you are dilating the last few centimetres), a surge in catecholamines is beneficial to you and your baby. It helps to:

- Stimulate the fetal-ejection-reflex (strong contractions that help propel your baby down the birth path)
- Gives you a burst of energy for the second stage of labour and for meeting your baby
- Protects your baby during descent, allowing oxygen to be prioritised for their brain and heart
- Prepares your baby's lungs for the transition for breathing
- Optimises your baby's blood glucose
- Gives your baby a burst of energy so they are wide awake and alert for bonding and feeding.

How do I harness catecholamines?

In order to harness catecholamines, you want levels to be nice and low in the early stages of labour, and to peak around transition (just before the baby begins to descend).

Effective ways to keep catecholamines low in early labour include:

- Staying calm, comfortable, and relaxed
- Being informed and prepared
- Having trust and confidence in your ability to give birth
- Having practiced comfort measures and breathing techniques in advance of your labour
- Having a birth team you know and trust
- Choosing a calm, peaceful, and private birthing environment
- Stay warm
- Avoiding invasive procedures such as vaginal exams as much as possible.

The natural surge in catecholamines around transition can sometimes make you feel panicked. Recognising this, and being reminded by your birth team that this is a natural part of labour and is a positive sign that your baby will be born soon will help to turn this panic into excitement.

In some cultures birth attendants give a woman a fright to boost catecholamines at transition and help ensure a fast descent and birth.

What should I avoid?

High levels of catecholamines in early labour will slow and possibly stop your contractions. This makes the labour more painful and more distressing for your baby which can lead to a cascade of interventions. Keep levels low by avoiding the following:

- Birthing in an environment that you do not feel safe
- Loud noises or a lack of privacy
- Fear inducing discussions (even whispered in your presence)
- Getting cold
- Getting hungry
- Pain relief medication
- Non-essential caesareans. Babies born by caesarean section miss out on the boost of catecholamines that help to prepare the lungs for breathing.

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PROLACTIN

Prolactin is commonly known as the ‘mothering hormone’ because of its role in breastfeeding and maternal behaviour

What does prolactin do?

There are more than three hundred known effects of prolactin, which is released by the pituitary glands during pregnancy and lactation.

The main effects during pregnancy are:

- Preparing the your breasts for lactation
- Reducing your susceptibility to stress
- Increasing REM sleep
- Stimulating oxytocin secretion
- Increasing your appetite and food intake.

After the birth prolactin does the following:

- Encourages you to put your baby’s needs before your own
- Causes milk synthesis (this only happens after the placenta is expelled and progesterone levels drop)
- Creates a boost in mood and a feeling of calmness after breastfeeding
- Suppresses your fertility (note: this is not a reliable form of contraception).

How do I harness prolactin?

The best way to boost prolactin is by breastfeeding your baby. The ‘breast crawl’ is the name for the natural process that all babies follow when given time to discover the breast on their own.

During the breast crawl, the baby begins by kneading your breast, and eventually moves to suckling. Both of which both stimulate prolactin production.

Allowing the baby to find the breast via the breast crawl is also known to promote a good latch which is also key to a successful breastfeeding relationship.

One way to encourage the breast crawl is to place your baby between your breasts while in a semi-reclined position immediately after the birth. Use your hand to gently support them under their bottom but allow them to initiate all movement from that position. See an example of the breast crawl [here](#).

What should I avoid?

We know that prolactin levels are lower in mothers who:

- Have epidural anaesthesia
- Have caesarean sections
- Bottle feed

Avoiding these factors if possible will help ensure that your prolactin levels are nice and high.

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THE UPSHOT

The hormones of birth are complex. The main players are, oxytocin, beta endorphin, catecholamines and prolactin. To summarise what we have learnt so far, here is the upshot on each of these hormones.

Oxytocin

Oxytocin stimulates your uterus to contract, playing a major role in the birth of your baby and of the placenta. It is also a powerful bonding hormone. Encourage this hormone by creating a birthing environment and a support team who help you to feel safe and secure. Boost oxytocin with nipple stimulation, kisses, cuddles and orgasms for stronger, more effective contractions.

Beta-Endorphin

Beta-endorphin helps to relieve pain in childbirth and helps you to achieve the transcendent state where childbirth becomes a truly spiritual experience. Choosing and preparing for a natural birth, in an environment where you feel safe, with supporters you trust will help you to make the most of this amazing hormone. Breastfeeding keeps these lovely hormones pumping, helping you to feel content and satisfied.

Catecholamines

Feeling safe, private, and well supported is the best way to harness your catecholamines and ensure that you don't enter fight-or-flight mode which can slow your labour, increase pain and start a cascade of interventions. Avoiding unnecessary procedures, interventions and pain relief medication will help optimise catecholamine levels and give the best outcomes for you and your baby.

Prolactin

Prolactin is an important hormone for turning on your mothering instincts, encouraging you to nurture and protect your new baby and to put your baby's needs above your own. It also plays a key role in breastfeeding; not only in milk production but also creating feelings of calmness and satisfaction that encourage you to continue breastfeeding. The best way to boost this hormone is to breastfeed your baby.

How to harness the hormones of birth

The research to date has barely scratched the surface of what these hormones do and how they interact with each other and other aspects of labour. What we do know is that there are a few common factors in how we can use these hormones to our advantage, and the same for things to avoid.

Let's recap now what we can do to harness the hormones of birth in a beneficial way.

Prepare mentally

Birth is as much a mental game as a physical one. Preparing mentally will help you approach the birth in a calm manner, and avoid the fight or flight response triggered by catecholamines.

Address and release any fears you have surrounding pregnancy, birth or parenting. Education is an important part of this but the emotional side also needs addressing to let go of years of programming that birth needs to be a painful and difficult experience.

Choose your birth team

Feeling safe and feeling unobserved are very important for harnessing oxytocin and endorphins and limiting the release of catecholamines.

The first step is to choose a midwife or obstetrician you trust 100% with your birth plan. It is much easier to choose a provider whose default birth pattern fits with your birth plan than trying to convince the provider to accommodate your wishes. On your birthing day you need to be confident that you can relax into your birthing zone and allow your team to advocate on your behalf if needed.

Choosing who else is on your support team is also important, as is deciding who should not be there.

Choose your birth environment

The birth environment you choose should reinforce feelings of safety and privacy. Keep any emergency medical equipment out of sight, under a sheet if necessary. Birthing pools can create a sense of privacy, as can a light scarf or blanket pulled over your head. Simply closing your eyes and going within is another great strategy for promoting feelings of privacy.

Stimulate all your senses with familiar sights and sounds. Use music, dim lighting, your own aromatherapy or a familiar hand cream, foods that you like, and your own clothes and comfort items like a dressing gown and pillows.

Practise

Work with your birth partner(s) to find some breathing and relaxation techniques that will help you stay in a relaxed state throughout the labour. Practice these often in the lead up to your birth. These techniques should feel like second nature by the time of your birth and should be associated with feelings of calm and peace and positivity.

Avoid interventions

All of the above will help you to avoid unnecessary interventions and pain relieving medications. We know that epidurals and caesarean sections do have negative impacts on all of the major birthing hormones and that the impact lasts well past the birth of your baby.

Trust that your body knows how to birth

The final step is to trust in your body and allow your body to give birth. The birthing knowledge of all mammals is stored in the limbic system of your brain – a part of the brain that hasn't changed for thousands of years. Our more modern thinking brain (the neocortex) can get in the way during birth, so the more that we can trust and surrender to the birth, the easier and faster it will be.

How HypnoBirthing can help

As a certified Mongan Method HypnoBirthing Practitioner I can't help but give a little plug for HypnoBirthing here! To me, HypnoBirthing is all about working with the hormones of birth.

I focus on preparing you and your partner emotionally, teach you about the anatomy and physiology of gentle birth and use hypnosis to release the fears and limiting beliefs you hold about birth.

We practise relaxation and breathing techniques that work with your body, and deepening techniques that you or your partner can use to deepen your level of relaxation at any stage in the birth (and before or after the birth for that matter). I also support you to make informed choices about your birth team as well as any interventions or medications that are offered.

If you are based in Auckland and would like to know more about how HypnoBirthing can help you to harness the hormones of birth. Please do [get in touch](#). I'd love to hear from you.

Further reading

This guide draws heavily on the amazing work done by Dr Sarah Buckley, and Dr Michel Odent as well as the HypnoBirthing textbook. For more information about HypnoBirthing, please see [my website](#).

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