UNDERSTANDING YOUR CIRCADIAN RHYTHMS - WHY LIGHT MATTERS DURING PREGNANCY, BIRTH & EARLY PARENTHOOD

Our bodies are designed to follow a natural 24-hour cycle known as our **circadian rhythm**. This internal body clock influences far more than sleep – it helps regulate hormones, metabolism, mood, energy levels and even labour.

Modern life means many of us spend most of our day indoors under artificial lighting and our evenings looking at bright screens. Small changes to your daily light exposure can have surprisingly positive effects during pregnancy, birth and the postpartum period.

WHY YOUR CIRCADIAN RHYTHM MATTERS

Your body clock is controlled mainly by **light entering your eyes**.

In the morning, natural daylight tells your brain it's time to wake up, increasing alertness and helping regulate hormones throughout the day.

As daylight fades, your body begins producing **melatonin**, often called the sleep hormone, allowing your body to rest, repair and prepare for sleep.

Creating a clear contrast between **bright days and dark evenings** helps keep this system working as it should.

PREGNANCY & BIRTH

Your circadian rhythm doesn't just affect your sleep—it also plays an important role during labour.

Research suggests that:

- **Melatonin and oxytocin work together.** Melatonin makes oxytocin (the hormone responsible for contractions) more effective.
- This may help explain why many labours begin or become more established overnight when melatonin levels are naturally highest.
- Bright hospital lighting can reduce melatonin production, which may affect the hormonal environment that supports labour for some people. Wear a pair of sunglasses to overcome this!
- During pregnancy, the placenta also helps establish your baby's developing body clock.

AFTER YOUR BABY ARRIVES

Your baby's circadian rhythm continues to develop after birth.

If you're breastfeeding, breast milk naturally changes throughout the day:

- **Night milk** contains higher levels of melatonin-related compounds which may help babies settle.
- **Daytime milk** contains hormones that support wakefulness and alertness.

If expressing milk, some parents choose to give it at roughly the same time of day it was expressed where practical, although this isn't something to worry about if it's not possible.

So if you remember, write down the time the milk was expressed onto the collection bags – hopefully it will help you get a bit more sleep 😊.

CIRCADIAN RHYTHM & BLOOD SUGAR

Your metabolism also follows a daily rhythm.nResearch suggests our bodies generally process food more effectively earlier in the day, while insulin sensitivity naturally decreases during the evening.

Simple habits that may support healthy blood sugar regulation include:

- Eating a protein-rich breakfast.
- Getting outside in natural morning light.
- Finishing your evening meal a little earlier where practical.
- Limiting late-night snacks, particularly highly processed or sugary foods.

These habits may be particularly helpful alongside medical advice if you have gestational diabetes.

SIMPLE WAYS TO SUPPORT YOUR BODY CLOCK

DURING THE DAY

✓ Get outside within the first hour after waking if possible.

✓ Even 10–20 minutes of natural daylight is beneficial.

✓ Don't wait for sunshine—cloudy daylight is still much brighter than indoor lighting.

✓ Spend time outdoors whenever you can throughout the day.

DURING THE EVENING

✓ Dim your lights after sunset.

✓ Choose lamps or warm lighting instead of bright overhead lights (no big light!).

✓ Reduce screen time where possible before bed.

✓ Consider blue-light blocking glasses if you're using screens in the evening (a useful buy especially if you'll be scrolling during the night when your babe is here)

DURING LABOUR

You might like to include these in your birth bag:

- An eye mask/sunglasses
- Blue-light blocking glasses
- Battery-operated LED candles
- An aurora light (gorgeous way to transform any room to become the perfect birth environment!)

Ask your birth partner to turn off or dim the lights where possible during labour to help create a calm environment.

DURING NIGHT FEEDS

A dim red or amber night light can make a huge difference. Using low, warm lighting instead of bright white lights may help:

- protect your own melatonin production
- make it easier to fall back asleep
- gradually support your baby's developing body clock.

IF YOU'RE HAVING A CAESAREAN BIRTH

Melatonin isn't only important for sleep. It also acts as a powerful antioxidant and plays a role in tissue repair.

Supporting a healthy day/night rhythm during your recovery—getting daylight during the day while keeping evenings calm and dim—may benefit both recovery and sleep quality.

IN SUMMARY...FIVE SIMPLE HABITS TO REMEMBER

☀️ **Get outside soon after waking.** Morning daylight is one of the most powerful ways to support your body clock. Why not add this into your daily routine with a hot tea or coffee, and walk barefoot on the grass to add a bit of grounding in too!

💡 **Dim the lights in the evening.** Swap bright overhead lighting for softer lamps whenever possible.

🤍 **Create a calm birth environment.** Consider low lighting, an eye mask or blue-light glasses if they help you feel relaxed.

🍽️ **Eat earlier where you can.** Your body generally handles food better earlier in the day.

🌙 **Keep night feeds low-lit.** Warm, dim lighting helps everyone settle back to sleep more easily.