



# Understanding biomechanics for birth

If your labour is progressing efficiently and surges are building into a timely rhythm there is no need to disturb your position or safe space.

However, labour can sometimes stall at points. This too is normal. It could be that you have been disturbed, moved into a fight or flight situation where your mind has stepped in and adrenaline released. A conversation, or presence of someone new in your space can derail your calm, relaxed state, slowing down the efficient release of oxytocin to continue your surges. BUT it could be that you are experiencing a 'labour dystocia'.

Labour dystocia refers to a prolonged or slowly progressing labour. It can be present in the early labour / latent phase, but sometimes it goes unrecognised. And sometimes, if in a hospital setting, can be labelled as a 'failure to progress', therefore resulting in an offer to augment your labour in some way.

What could be happening is a **bio-mechanical** issue in your labour where your baby may not be in the most optimal position to move further down in your pelvis, this therefore affects labour progress.

Signs of a suboptimal positioned baby could be :

Intense pain in the back

Coupling - two surges very close together/double peaking.

Long contractions. A contraction that is 3 min long.

A long 2nd stage despite good strong pushes or no pushing urge with contractions spaced out

If these signals are present in your labour, its a good time to try new positions. Being active to create space in the pelvis will really help.



Try using - Molly O'Brien's & Spinning Babies techniques such as :

**Forward Leaning Inversion** - Stretches uterosacral ligaments.

**When to use -**

**During Pregnancy.** Daily as part of improving and maintaining pelvic balance and stability. Remain in position for 30 seconds or 3 breaths.

**Labour.** In latent and first stage of labour. 2 FLI for 30 seconds each in quick succession. 2 long breaths to regain balance or if dizzy.

*Contraindications: Hypertension, polyhydramnios, glaucoma or any condition that increases risk of stroke.*

**Sifting** with a scarf or rebozo daily.

**When to use**

**During Pregnancy.** Use a rebozo, shawl or scarf to gently sift (or rock) the abdomen. Can be used daily. This can soften the broad ligament and increase the likelihood of successful optimal positioning of the baby when used in conjunction with sidelying release and forward leaning inversion.

**Early Labour and first stage.** Also provides comfort in labour and promotes relaxation. It stimulates the parasympathetic response, i.e. slows the heart rate and relaxes muscle. Sift in-between contractions. Can be done for as long as the woman wants.

*Caution: if anterior placenta or history of APH, be gentle, not vigorous.*

**Sidelying release** can be done weekly or more if there are pelvic issues e.g. history of an accident. It is a *static stretch of deep pelvic muscles including Piriformis.*

**When to use**

**During Pregnancy.** Weekly as part of a sequence of positions to improve and maintain pelvic balance and stability. 5-10 minutes each side.

**Labour.** At any point in labour where malposition is suspected or confirmed, latent, especially if prolonged, first and second stage, where slow progress despite good pushing effort or when contractions space out. 5-10 minutes each side or for three contractions.

Suitable for women with an epidural. Repeat every 3-4 hours if necessary.

Advisable to mobilise for several minutes following SLR.

*Always use on both sides. Position can be held during contraction if woman can manage this without too much discomfort*



As part of your pregnancy preparation, it is helpful for consider the following as part of your routine :

- Walk daily
- Swim
- Yoga or Pilates
- Wear correct size bra.
- See physio, osteopath, or other physical therapist, if known pelvic or spinal alignment problems — eg after a fall or accident.
- Avoid reclining on soft sofas.
- Calf Stretches

Wearing shoes with a heel or sitting for long periods can cause calf muscles to shorten. They join the hamstrings at the knee — which attach to the pelvic floor at the other end. Lengthening and stretching these muscles can improve and maintain pelvic balance.

- Use the correct size Birth ball to sit and to rotate hips to help mobilise and free sacrum. Kneel and lean forward using the ball for support.

Your height 4'8" to 5'3" = 55cm ball

Your height 5'4" to 5'10" = 65cm ball

Your height 5'11" to 6'4" = 75cm ball

### References :

1. <https://optimalbirth.co.uk>
2. Watch videos : <https://biomechanicsforbirth.com/index.php/online-courses>
3. <https://www.spinningbabies.com>
4. A great book - Changing Birth on earth by Gail Tully