

# Optimal Fetal Positioning

'**Optimal Fetal Positioning**' is a theory developed by a midwife, Jean Sutton, who found that the mother's position and movement could influence the way her baby lay in the womb in the final weeks of pregnancy. Many difficult labors result from 'malpresentation', where the baby's position makes it hard for the head to move through the pelvis, so changing the way the baby lies could make birth easier for mother and child.

The 'occiput anterior' position is ideal for birth - it means that the baby is lined up so as to fit through your pelvis as easily as possible. The baby is head down, facing your back, with his back on one side of the front of your tummy. In this position, the baby's head is easily 'flexed', ie: his chin tucked onto his chest, so that the smallest part of his head will be applied to the cervix first. The diameter of his head which has to fit through the pelvis is approximately 9.5 cm, and the circumference approximately 27.5cm. The position is usually 'Left Occiput Anterior' or LOA - occasionally the baby may be Right Occiput Anterior or ROA.

The 'occiput posterior' (OP) position is not so good. This means the baby is still head down, but facing your tummy. Mothers of babies in the 'posterior' position are more likely to have long and painful labours as the baby usually has to turn all the way round to facing the back in order to be born. He cannot fully flex his head in this position, and diameter of his head which has to enter the pelvis is approximately 11.5cm, circumference 35.5cm.

This means that often posterior babies do not engage (descend into the pelvis) before labor starts. The fact that they don't engage means that it's harder for labor to start naturally, so they are more likely to be 'late'. Braxton-Hicks contractions before labor starts may be especially painful, with lots of pressure on the bladder, as the baby tries to rotate while it is entering the pelvis.

Posterior presentation is more of a problem for first babies and their mothers than it is for subsequent births; when a mother has given birth before, there is generally much more room for maneuver, so it is easier for the baby to rotate during labor.

Sutton notes that the rate of posterior presentation has increased drastically in the last few decades, apparently in line with changes in the way women use their bodies. Sitting in car seats and leaning back on comfortable sofas, together with less physical work, have combined to produce an increase in posterior presentations. Paying attention to your posture in the last few weeks of pregnancy can help to reverse this trend. Since keeping reasonably active in pregnancy, and practicing good posture, isn't going to do anyone any harm, this theory at least deserves to be considered.

## **When do you need to start doing something about this?**

Pay attention to your posture at the time when your baby may be starting to 'engage', which means its head will be descending into the pelvis. This means for the last six weeks of your first pregnancy, and the last two or three weeks of subsequent pregnancies. In your second and later pregnancies, the uterus is more roomy and the baby will not normally start to descend into the pelvis until later, and often not until labor starts.

## **What position is your baby in?**

This is important because you need to know when your baby moves into a good position, so that you can encourage it to stay there! You can learn to tell what position your baby is in, by asking midwives to show you what to look out for, and by practicing feeling for the baby yourself.

When the baby is anterior, the back feels hard and smooth and rounded on one side of your tummy, and you will normally feel kicks under your ribs. Your belly button (umbilicus) will normally poke out, and the area around it will feel firm. When the baby is posterior, your tummy may look flatter and feel more squishy, and you may feel arms and legs towards the front, and kicks on the front towards the middle of your tummy. The area around your belly button may dip in to a concave, saucer-like shape.

If your baby is posterior, you may find that you suffer backache during late pregnancy (of course, many women suffer backache then anyway). You may also experience long and painful 'practice contractions' as your baby tries to turn around in order to engage in the pelvis.

### Practical steps to avoid posterior positions

The baby's back is the heaviest side of its body. This means that the back will naturally gravitate towards the lowest side of the mother's abdomen. So if your tummy is lower than your back, eg: you are sitting on a chair leaning forward, then the baby's back will tend to swing towards your tummy. If your back is lower than your tummy, eg: you are lying on your back or leaning back in an armchair, then the baby's back may swing towards *your* back.

Avoid positions which encourage your baby to face your tummy. The main culprits are said to be lolling back in armchairs, sitting in car seats where you are leaning back, or anything where your knees are higher than your pelvis.

The best way to do this is to spend lots of time kneeling upright, or sitting upright, or on hands and knees. When you sit on a chair, make sure your knees are lower than your pelvis, and your trunk should be tilted slightly forwards.

- Watch TV while kneeling on the floor, over a beanbag or cushions, or sit on a dining chair. Try sitting on a dining chair facing (leaning on) the back as well.
- Use yoga positions while resting, reading or watching TV - for example, tailor pose (sitting with your back upright and soles of the feet together, knees out to the sides)
- Sit on a wedge cushion in the car, so that your pelvis is tilted forwards. Keep the seat back upright.
- Don't cross your legs! This reduces the space at the front of the pelvis, and opens it up at the back. For good positioning, the baby needs to have lots of space at the *front*
- Don't put your feet up! Lying back with your feet up encourages posterior presentation.
- Sleep on your side, not on your back.
- A Birth Ball can encourage good positioning, both before and during labor.
- Various exercises done on all fours can help, eg: wiggling your hips from side to side, or arching your back like a cat, followed by dropping the spine down.

### If your baby is already posterior...

When your baby is in a posterior position, you can try to stop him/her from descending lower. You want to avoid the baby engaging in the pelvis in this position, while you work on encouraging him to turn around. Jean Sutton says that most babies take a couple of days to turn around when the mother is working hard on positioning.

- Avoid deep squatting
- Use the 'knee to chest' position. When on hands and knees, stick your bottom (butt) in the air, to tip the baby back up out of your pelvis so that there is more room for him to turn around.
- Sway your hips while on hands and knees
- Crawl around on hands and knees. A token 5 minutes on hands and knees is unlikely to do the trick - you need to keep working at this until your baby turns. Try crawling around the carpet for half an hour - while watching TV or listening to music. It is good exercise as well as good for the baby's position!
- Don't put your feet up! Lying back with your feet up encourages posterior presentation.
- Swim belly-down, but avoid kicking with **breaststroke legs** as this movement is said to encourage the baby to descend in the pelvis [3]. You can still swim breaststroke, but simply kick with straight legs instead of "frogs' legs".
- Try sleeping on your tummy, using lots of pillows and cushions for support.

When your baby turns to an anterior position, you can encourage him to descend further into the pelvis - by walking around upright, massaging your bump downwards, deep squatting, and swimming - and now you can use lots of breaststroke "frogs' legs" kicking.

### **If your baby is posterior when you go into labor:**

These movements can help the baby wriggle through your pelvis, past the ischial spines inside it, by altering the level of your hips. They are also helpful if the baby is anterior but has a presentation problem, eg: his head is tipped to one side (asynclitic).

- In early labor, walk up stairs - sideways if you need to.
- Rock from side to side
- March or 'tread' on the spot
- Step on and off a small stool
- Climb in and out of a birth pool
- The positions listed below may also help.

For the second stage:

- Use kneeling or all-fours positions. Kneeling on one knee can help.
- Supported squatting in second stage, but the mother must be lifted quite high up; her bottom should be at least 45cm (18 inches) off the floor.
- Birth stool seats should be at least 45cm (18 inches) from the floor.
- Avoid lying on your back, semi-reclining, sitting or semi-sitting. These positions all reduce the available space for the baby to turn. Lying on the side is OK.