



Big Babies

You may be advised by your midwife that your babies estimated weight exceeds what is 'expected' for its gestation - therefore 'large for gestational age'. You will be offered a fundal height measurement. If these measurements are deemed outside the normal range, you'll be offered a growth scan.

Scans to measure the size of your baby can be very inaccurate and the weight estimation can be out by 15-20%. A baby that is estimated to be 8lbs, can be anything from 6lbs 13oz to 9lbs 3oz.

Sarah Wickham - In your own time book says :

The definition of a large baby varies a bit. Many organisations define a large baby as one who weighs more than 4Kg (8.13lbs) at birth.

"Big babies are normal in well resourced countries. Over 10% of babies born in the UK and Australia weigh 4kg (8lb 13oz) or more. Healthy well nourished women grow healthy well nourished babies. Genetic factors also influence the size of babies (big babies run in families); and each baby a woman has usually weighs more than the last. Babies also continue to grow at the end of pregnancy (because placentas continue to nourish them rather than switch off) - so a baby will be bigger at 42 weeks than they were at 40 weeks."
(ref.3)

However, abnormal blood glucose levels (BGLs) – with uncontrolled gestational diabetes (GD) – can also cause a baby to grow big. Babies who are big because of high BGLs are a different shape to 'normally' large babies. In particular, their shoulders and chest are larger and fatter, and they are more likely to encounter complications at birth. Unfortunately, research into big babies usually combines the outcomes for GD babies with non-GD babies.

If growth scans were used regularly throughout pregnancy, they would be more accurate for plotting growth but as a one off near the end of pregnancy, it doesn't tell us much.

Growth scans in late pregnancy are associated with a higher chance of induction or caesarean birth.

"The only way to accurately assess the weight of a baby is to weigh them after birth. Clinical assessment ie. palpating and measuring pregnant bumps is incorrect more than 50% of the time (Chauhan et al. 2005). Even the best available method – measuring the baby's abdomen with an ultrasound – only predicts the weight of the baby within 15% of their actual weight (Rossi et al. 2013). Therefore, lots of women are being incorrectly told that their baby is 'big'. A US study found that one out of three women were told their baby was 'too big' based on ultrasound (Cheng et al. 2015). In this study the average birth weight of the group of babies suspected of being big was 7lb 13oz – ie. not big at all." - Rachel Reed (3)

NICE guidelines and World Health Organisation guidelines both state that induction of labour should not be carried out simply because a baby is suspected of being big – In the absence of any other complexities such as diabetes or raised BMI we shouldn't be inducing on estimated size alone. When comparing induction of labour with spontaneous labour there is no significant difference in instrumental or caesarean birth rates. Induction did reduce the chances of shoulder dystocia from 6.8% to 4.1%. Although the risk of this happening is small between 4-7%.

RCOG research shows that 0.58% to 0.7% of babies with shoulder dystosia. This means **99.3%** will not experience it. The risk factors are greater when inducing labour for big babies. For example – lying on your back, restricting room for baby to move down into the birth canal. Drugs given (fentonil) cause the pelvic floor will be floppy and cannot easily guide the baby out. Space is compromised and less ease to mobilise into physiological positions. While 52% of babies get 'stuck' on way out due to being 'big babies' (according to RCOG report) 48% of babies aren't getting stuck!

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Giving birth to a big baby is associated with an increased chance of particular outcomes. The main complication associated with big babies is shoulder dystocia.

The incidence of shoulder dystocia increases with the size of the baby. For example, it occurs with around 1% of babies weighing less than 3.9kg (8lbs 8oz), compared to 5–9% of babies weighing between 3.9kg and 4.5kg (9lb 9oz) (Politi et al. 2010).

Other less likely complications associated with big babies are severe perineal tearing (0.6%) and postpartum haemorrhage (1.7%) (Weismann-Brenner et al. 2012).

However, research suggests that the complications associated with big babies may be due to interventions carried out when a baby is suspected to be big. Care providers are more likely to diagnose slow progress during labour and recommend a caesarean if they suspect the baby is big (Blackwell et al. 2009).

Women who are told that they have a 'big baby', and are counselled about potential complications, are significantly more likely to choose a planned caesarean (Peleg et al. 2015).

One study compared the outcomes of a group of women with suspected big babies with a group of women who unexpectedly gave birth to a big baby (Sedah-Mestechkin et al. 2008).

Women who were suspected of having a big baby were three times more likely to have an induction or caesarean, and were four times more likely to have complications such as severe perineal tearing and postpartum haemorrhage. In this study there were no differences in the incidence of shoulder dystocia between the two groups.

Therefore, when a baby is suspected of being big, a woman has an increased chance of interventions during birth, and of experiencing complications caused by those interventions, even if the baby is not actually big.

The perception of a baby's size influences outcomes more than the actual size of the baby.

A Cochrane Review comparing induction of labour before 40 weeks for a suspected big baby with waiting for spontaneous labour, found that "antenatal estimates of fetal weight are often inaccurate so many women may be worried unnecessarily, and many inductions may not be needed."

The complications associated with big babies may reflect care provider fear and practice.

Women need to be given this information before agreeing to an ultrasound scan aimed at estimating the size of their baby. Once the 'big baby' label is applied it cannot be removed and may alter the birth experience and outcome.

Sara Wickham's Birth Information Update - July 2022

Many women are told they need to be induced because their baby is thought to be large and “at risk” of shoulder dystocia, which is where a baby’s shoulders can get stuck as they are being born. And yet the logic on which this recommendation is based is questionable.

Part of the problem is the wide margin of error in the ultrasound weight estimates that are the basis for the recommendation for induction for suspected fetal macrosomia. I mentioned several studies that highlighted this margin of error in [In Your Own Time](#). So I was interested to spot a new study on this topic in the American Journal of Perinatology.

This study looked at data from more than 1700 women who had uncomplicated births and showed that fetal biometrics (or the measurements taken during an ultrasound) “have limited ability to predict shoulder dystocia and lack clinical usefulness.” ([Newman et al 2022](#)).

The researchers looked at sociodemographic factors (things like age and ethnicity) and maternal anthropometrics (things like someone’s weight) and found that there were no differences between those whose babies had shoulder dystocia and those who did not.

They could find no relationship between the measurements taken at ultrasound and a baby’s chance of experiencing shoulder dystocia.

In fact, only one thing was associated with a higher chance of shoulder dystocia, and that was whether or not the woman had an epidural. Those who had epidurals were more likely to experience shoulder dystocia.

The researchers concluded that, “Both individually and in combination, fetal biometrics had limited ability to predict SD and lack clinical usefulness.” ([Newman et al 2022](#)).

This adds weight (yes, pun intended!) to the question of why so many women are offered induction for a suspected big baby. The prevention of shoulder dystocia is the main reason for offering this. Yet, as this study again shows, ultrasound estimates of a baby’s possible weight and size do not predict which babies will be larger and/or have shoulder dystocia.

That’s only one part of the problem with the ‘induction for big babies’ argument. But it’s a significant part.

Original research at

<https://www.thiemeconnect.de/products/ejournals/abstract/10.1055/a-1787-6991>

Newman RB et al (2022). Fetal Growth Biometry as Predictors of Shoulder Dystocia in a Low-Risk Obstetrical Population. Am J Perinatol DOI: 10.1055/a-1787-6991

References to read more :

- <https://www.nice.org.uk/guidance/ng121/evidence/q-largefor gestational age-baby-pdf-241806242780>
2. <https://www.sarawickham.com/research-updates/the-risks-of-estimating-an-unborn-babys-weight/>
3. <https://midwifethinking.com/2019/09/02/big-babies-the-risk-of-care-provider-fear/>
4. https://www.cochrane.org/CD000938/PREG_induction-labour-or-near-end-pregnancy-babies-suspected-being-very-large-macrosomia
5. <https://pubmed.ncbi.nlm.nih.gov/18299867/>

Midwife Nadia says : With all scans, there is a 15% plus margin of error on weight estimation. This is important to consider. I will measure and feel your baby regularly to ensure its consistent throughout your pregnancy".