

Fetal Growth Restriction (FGR) / Having a Small Baby

Babies come in all sizes. Some are just naturally larger or smaller than others. But in some cases, babies in the womb don't grow as well as we expect them to. This is a condition known as fetal growth restriction (FGR). Babies with FGR are at an increased risk of complications before, during, and after birth. An unborn baby is considered small if their size or estimated weight on an ultrasound scan is less than the 10th percentile. This means that out of every 100 babies, 10 would be this size or smaller. However, many babies who are smaller than expected are healthy. Babies are resilient and with the appropriate specialist medical care and monitoring, even a small baby can have good health outcomes.

There are some features of the mother and her support person that can impact growth during pregnancy. A mother's characteristics can affect the size of the baby, including:

- her height and weight
- her ethnicity
- the number of babies she has had
- any pre-existing illnesses or illness developed during the pregnancy.

Why is measuring your baby's growth important?

Your doctor or midwife will regularly measure your baby's growth during your pregnancy, to check that your baby is growing at an acceptable rate.

At each antenatal appointment, from 24 weeks of pregnancy onwards, the distance between the top of your womb to your pubic bone (symphysiofundal height) should be measured with a tape measure and plotted on a chart.

Recording this measurement will show us if your baby is growing as expected. If the growth slows down or measurement suggests that your baby may be small, your doctor or midwife may advise you to have an ultrasound scan. If there are growth concerns closer to your due date, your doctor or midwife may discuss the option of having your labour induced rather than waiting for labour to occur naturally.

Women who are at increased risk of having a small baby may have regular ultrasound assessments of the baby's growth and wellbeing. This may include women who have had a small baby previously, who have high blood pressure or another medical condition, or who develop a complication of pregnancy.

What is growth restriction?

Many babies that are shown to be smaller than expected for that stage of pregnancy (small for gestational age or SGA) are healthy and just naturally small. However, some babies are small because they are not growing as quickly as they should and this is called fetal growth restriction (FGR).

It is important to recognise FGR because these babies are at increased risk of complications before, during, or after birth and therefore require closer monitoring than normally grown babies. Sometimes it is not clear whether a small baby is healthy or growth restricted and this may take more than one scan to determine.



Causes of growth restriction include:

- Placental insufficiency—when the placenta is not working as well as it should and does not provide adequate nutrition to the developing baby
- Medical conditions affecting the mother such as high blood pressure and diabetes
- Lifestyle factors such as vaping, smoking, drinking alcohol or other substance use, including taking drugs
- Infection during pregnancy that affects the baby
- Having a baby with a chromosomal or genetic condition
- Poor nutrition

What if my baby is small or not growing as expected?

If your baby is small or not growing as expected, your doctor or midwife may ask you to have the following tests to check your baby is healthy and active:

- ultrasound scan – this measures your baby's growth and size
- amniotic fluid measurement - measuring the amount of fluid around your baby
- Doppler ultrasound – this measures the blood flow between the baby and placenta and about the health of the baby
- a cardiotocograph (CTG) – this is a tracing of your baby's heart rate to see if your baby is moving and healthy.

Once your healthcare team has identified that your baby is small, your antenatal care may be modified to ensure you receive the best care to manage your individual risk factors. Your pregnancy management is based on the baby's wellbeing and how far along your pregnancy is. The baby will be closely watched (usually with frequent antenatal visits and ultrasounds) to keep an eye on your baby's growth and wellbeing and watch for other potential problems.

If there is a concern that your baby might be small, you may be referred to a specialist for more frequent and detailed scans, especially if you are still early in your pregnancy. If your doctor is concerned about your baby's growth rate, your pregnancy may be deemed high-risk.

Sometimes it is recommended that the baby is born early if there are concerns about the baby's health in the womb. Sometimes we give medications to the mother to help the baby in case it needs to be born early. Some babies may need an elective caesarean birth or early induction of labour and others may be able to await spontaneous labour.

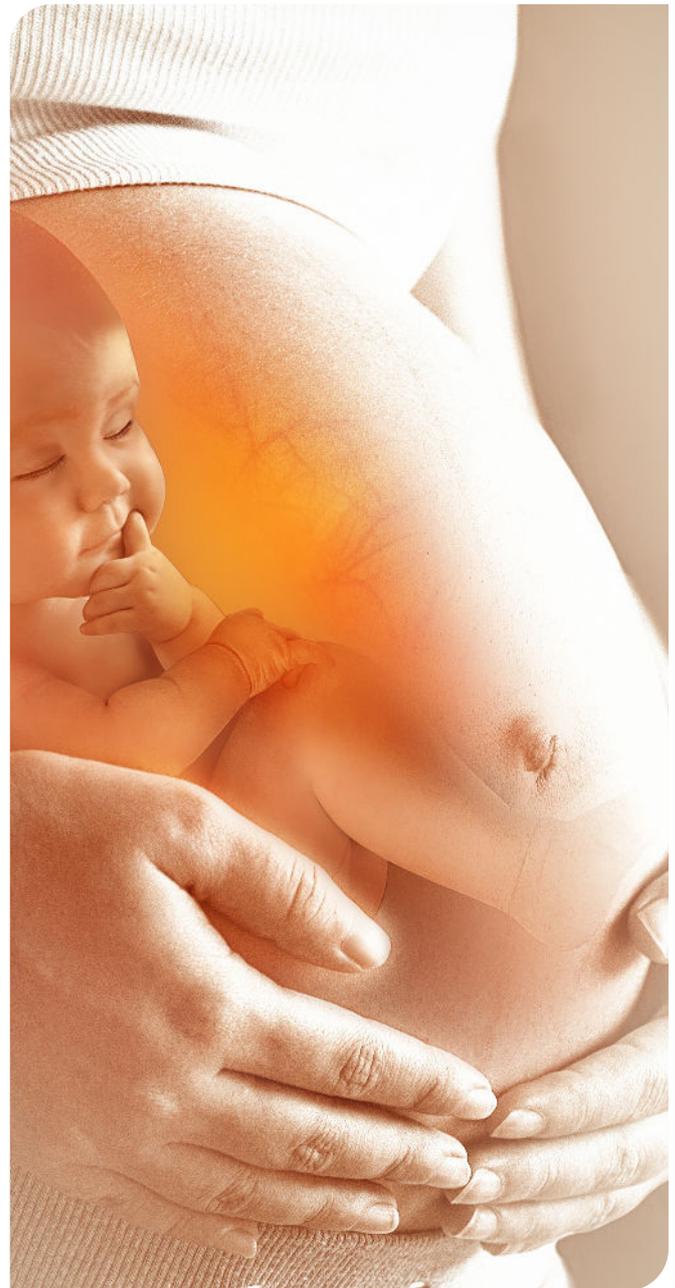
What happens if my baby is growth restricted?

If your baby is growth restricted, you will be advised to have your baby in a hospital. This is so that you have access to the appropriate facilities (such as neonatal support) to care for your baby. It is important that you receive care in a hospital equipped with a neonatal unit or special care nursery appropriate to your baby's likely needs, and this may require transfer to a larger maternity hospital, particularly if your baby is very early or very small. It may be that your preferences for birth require change so that you and your baby can be provided with additional support.

You may be advised to have your baby early. This will depend on your baby's growth, blood flow measurements, movements, and other measures of wellbeing. The scans will help you and your doctor decide whether it is better for your baby to be born early or safer for you and your baby to continue your pregnancy longer.

Can I do anything to reduce the risk?

Some of these risks cannot be changed, and there is not much that can be done to prevent it. Some things you can do to reduce the risk of having a



growth restricted baby are:

- Quitting smoking – your doctor or midwife can refer you for support to help you stop smoking.
- Avoiding drugs or other substances other than for medical purposes.
- Leading a healthy lifestyle and eating healthily reduces the risk of having a small baby.
- If you are at increased risk of preeclampsia (a serious condition that is characterised by high blood pressure, protein in the urine and severe swelling), you may be advised to take low-dose aspirin during your pregnancy until your baby is born.

Monitoring your baby's movements

Feeling regular baby movements is a sign that your baby is well. You may feel



your baby's movements as anything from a kick or a flutter, to a roll or a swish. It is important that you get to know your baby's pattern of movements through sitting or lying down, learning when your baby is most active and monitoring their movements at those times.

There are many common myths about baby movements that are incorrect. There is no set number of normal movements. It is not true that babies move less or slow down towards the end of your pregnancy. The position of your placenta does not matter and you should still feel your baby moving regularly. You should continue to feel your baby's regular movement patterns right up to the time of birth. The myth that having a cold drink or something to eat to stimulate your baby does not work. Trust your intuition. If you are concerned about your baby's movements, contact your doctor or midwife immediately.

If your baby is small but healthy, they are not at increased risk of complications. If your baby is growth restricted, there is an increased risk of stillbirth (death of the baby before birth). For this reason, it is very important to be aware of your baby's pattern of movements and monitor this for change. If your baby's movement pattern changes in routine, strength, or frequency, it may be a sign that your baby is unwell.



Planning for the birth

When planning the birth of a baby with suspected growth restriction, you may be referred to other specialists for ongoing care. A number of factors will be considered, such as:

- maternal condition
- gestational age, your baby's condition, and estimated weight
- method of induction of labour and type of birth
- continuous fetal heart rate monitoring during labour
- access to appropriate neonatal services
- any preferences that you or your family/whanau may have.

If there are no other complications, you may be able to have a vaginal birth and your baby will be monitored closely during labour. However, if there are further complications such as concerns about your scan, your doctor may recommend that your baby is born by caesarean birth.

Informed consent

If you are undergoing any kind of healthcare treatment, procedure or other intervention, you have the right to make an informed choice about your care. Informed consent is your permission, given voluntarily, to proceed with treatment.

It is a clinician's responsibility to ensure informed consent is properly obtained and appropriately timed by communicating and working with you to help you make the best decision for yourself.

Future pregnancies

The birth of a baby with growth restriction is a significant risk factor for a small baby in a subsequent pregnancy. Where possible, the underlying cause for growth restriction should be investigated to assess for the risk of recurrence, including a microscopic examination of the placenta, as this may change the care that is recommended in a future pregnancy. When considering another pregnancy, it is important to maintain a healthy lifestyle including, not smoking, treating long-term medical conditions, and keeping a healthy weight, to increase the chance of the best outcome for your baby.

Questions you may want to ask your doctor or midwife

- What does having a small baby mean for me and the health of my baby?
- When and how will I be assessed for FGR?
- Will I require additional check-ups during my pregnancy?
- Why is my baby growing at a slower rate? What is causing this?
- What can I do to monitor my baby's health?
- Will having a small baby affect how and where I can give birth?

Useful resources

- <https://ranzcoг.edu.au/wp-content/uploads/2022/06/Planning-for-pregnancy-pamphlet.pdf>
- <https://ranzcoг.edu.au/wp-content/uploads/2022/06/Pre-eclampsia-and-High-Blood-Pressure-During-Pregnancy.pdf>
- <https://www.pregnancybirthbaby.org.au/having-a-small-baby>
- https://stillbirthcre.org.au/wp-content/uploads/2021/03/SB_Growing_Matters_Flyer_A5_v2_March-1.pdf
- <https://www.health.gov.au/resources/pregnancy-care-guidelines/part-d-clinical-assessments/fetal-growth-restriction-and-well-being>
- <https://ranzcoг.edu.au/news/statement-on-inclusive-language/>

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