

Checking Blood Glucose of Newborn Babies

What is glucose?

- Glucose is a type of sugar. **It is your baby's most important source of energy.** Glucose is very important for your baby's growth and development.

Where do babies get glucose?

- Before birth, babies get glucose from the placenta through the umbilical cord. They store some of this glucose for their first few days of life. Once babies are born, they get glucose from their feedings.

Why does my baby need glucose checks?

- Healthy babies born full-term (37 weeks and above) have stored enough glucose to last until they are feeding well (usually by 3 days after birth).
- Your baby may need glucose checks if they:
 - › were born pre-term (before their due date).
 - › are smaller or larger than average.
 - › have a medical condition that causes low blood glucose levels.
 - › were exposed to certain medications during pregnancy.
- Babies born to people who had diabetes before or during pregnancy may also need glucose checks. Large babies and babies of mothers with diabetes may have a hormone imbalance that keeps them from using their stored glucose.
- Pre-term and small babies may not have enough glucose stored to keep their blood glucose levels up.

How are blood glucose levels checked?

- A member of your health care team will take a few drops of blood from your baby's heel to check their blood glucose level.
- Before their blood is taken, ask how you can help make your baby more comfortable during the procedure, like holding them skin-to-skin against your chest.

- If your baby is at risk for low blood glucose levels, they will be tested within 2 hours after birth, and then before each feeding (every 3 to 6 hours). If their blood glucose level stays low even with feedings, the health care team may need to keep checking them.

What is a normal blood glucose level for a baby?

- Blood glucose is measured in millimoles per litre (mmol/L). Normal newborn blood glucose levels are:
 - › Greater than or equal to 2.6 mmol/L in the first 72 hours after birth
 - › Greater than or equal to 3.3 mmol/L after 72 hours
- Blood glucose levels usually become normal within 12 to 72 hours (3 days) after birth, especially once your baby is feeding regularly. If your baby's blood glucose levels are not normal, the health care team will talk with you about treatment.

How are low blood glucose levels treated?

- If your baby's blood glucose level does not go up on its own, you can give your baby extra feedings. These can be from breast/chestfeeding, expressed breastmilk, or substitutes (formula). Please talk to your health care provider before using a substitute.
- The health care team may place a special glucose gel in your baby's mouth to help raise their blood glucose level.
- If your baby's blood glucose level does not go up after extra feedings, they may need intravenous (I.V.) treatment (through a small tube that is inserted into a vein in their arm or hand).

How can low blood glucose levels be prevented?

The best way to keep your baby's blood glucose level up is through early and regular feedings. Talk to your health care provider about safe feeding options for your baby.

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

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