

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 important for normal activity, 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 feeding well, they get glucose from their feedings.

Do all babies need glucose checks?

No, not all babies need glucose checks. Healthy full-term babies have enough stored glucose to last until feeding is well established (usually by the 3rd day after birth).

Who needs to be checked?

Babies who are more likely to have low blood glucose levels need to be checked regularly. These include:

- › preterm babies (born before their due date)
- › babies who are smaller than average
- › babies who are larger than average
- › babies whose mothers had diabetes before or during pregnancy
- › babies with certain medical conditions that cause low blood glucose

Preterm and small babies may not have enough glucose stored to keep their blood glucose levels up. Large babies and babies of mothers with diabetes may have a hormone imbalance that keeps them from using their stored glucose.

How are blood glucose levels checked?

A few drops of blood will be taken from your baby's heel. If your baby is at risk, they will be tested by 2 hours after birth, and then before each feeding. If their glucose stays low even with feedings, checks may continue.

Blood glucose levels usually go back to normal within 12 to 72 hours (3 days) after birth, especially once your baby is feeding regularly.

What is a normal blood glucose level for a baby?

Blood glucose levels change with age. They are usually lower in newborn babies than in older children and adults.

Blood glucose is measured in millimoles per litre (mmol/L). For newborn babies, their first blood glucose level should be at least 1.8 mmol/L. After their first glucose level, every level after should be greater than 2.6 mmol/L.

Your baby may need treatment if their blood glucose levels are too low.

How is low blood glucose 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 breastfeeding, pumped breast milk, or breast milk substitutes (formula). Your baby may be given a special glucose gel to help raise their blood glucose level. Please talk to your health care provider before using formula.

If your baby's blood glucose level doesn't go up after extra feedings, intravenous (IV) treatment (through a needle inserted into your baby's vein) will be needed.

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 feeding. Talk to your health care provider about safe feeding options for your baby.

Maternal/Child Unit: _____

Phone number: _____

*Prepared by: Maternal Child Provincial Policy Working Group
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