What is hypoglycemia? The amount of sugar in our blood, called blood sugar or blood glucose, is the fuel that keeps all of our body systems working. If this level dips too low, it is called hypoglycemia:

\[ \text{hypo = low glycemia [glahy-SEE-mee-uh] = sugar in the blood} \]

The human body needs a certain amount of sugar in the bloodstream to help fuel body systems, such as the brain and muscles. Without it, these systems can’t function well. Although the body stores some sugar in the muscles and in the liver, one of the main ways the body obtains the needed sugar is through food.

How does hypoglycemia affect babies? Low blood sugar can happen in any newborn, but some babies have a higher risk for it (see below). Because a baby’s body requires so much energy (sugar) after birth, low blood sugar usually occurs within the first few hours after birth. In general, the risk for low blood sugar in a healthy, full-term newborn declines shortly after birth. Yet, if blood sugar stays too low for too long without treatment, it can affect the brain. The effects can range from mild to severe, and may result in learning problems, vision problems, and impaired development of motor skills and speech.

How do we know if our baby has low blood sugar? Babies known to be at risk for low blood sugar are given a blood test. To do this, the nurse or doctor takes a small drop of blood from the baby’s heel. There may also be some visible signs, but this varies with every baby. Signs may include: the baby does not feed well; has a high-pitched or weak cry; seems to shake or shiver; is very weak with limp muscles; breathes very fast; and has a high heart rate. More severe signs may include: the baby stops breathing for short periods of time (called apnea); has seizures; or has a bluish color to his or her skin (called cyanosis).

Babies have an increased risk for low blood sugar if:

- the first feeding occurs six hours or more after birth (and the baby is not being given nutrients through any other method).
- they are born early (premature) and/or with a low birth weight (less than 5.5 pounds or 2,500 grams).
- they are born too small for the number of weeks they have been in the womb.
- they are born too large for the number of weeks they have been in the womb.
- their body is under stress due to a health problem, such as lack of oxygen (stress causes the baby’s body to use more sugar).
- their mother has diabetes (type 1, type 2, or gestational).
- they are born with a health problem that is known to cause low blood sugar.
- their mother takes or receives medicine(s) known to cause low blood sugar in babies.
What is the treatment for hypoglycemia? Treatment depends on how severe the low blood sugar is in your baby and on your baby’s feeding skills. In some cases, frequent feeding is enough to correct the problem. In other cases, the doctor or advanced practitioner caring for your baby may provide extra sugar in a mixture that is given through a tube placed in the baby’s nose or mouth. In severe cases, sugar (called glucose) is fed right into the baby’s bloodstream through a needle placed in the infant’s vein. This is called an intravenous line or IV. The baby may need an IV for several days, but he or she can usually still feed from the mother’s breast or bottle during this time. For cases in which a health problem causes the low blood sugar, the baby may also be given medicine depending upon the cause of the problem.

What can parents do? All parents can play a key role in taking an active part in their baby’s care. Many babies who have had a mild case of low blood sugar may not have problems from it later in life. If your baby has had a severe case of low blood sugar, a vital aspect of your role is to take your baby for all checkups with a primary care doctor. Routine visits may include checking your baby’s learning skills, emotional and behavioral development, motor skills, and hearing and vision. Because mild brain injury from low blood sugar may not be noticed right away, these visits can help you keep track of your baby’s health.

If you are breastfeeding or giving your baby breast milk: Keep in mind that low blood sugar is not caused by a lack of sugar in your breast milk. If your baby needs extra nutrition or an IV to correct low blood sugar, this may be used on a short-term basis. During this time, a key action you can take is to keep your milk supply going, pump your milk and hold your baby skin-to-skin. Holding your baby also helps soothe your baby and can help keep the baby’s other body systems (such as body temperature) stable.


Find the research

- Academy of Breastfeeding Medicine
  www.bfmed.org
- NICHD Cochrane Neonatal Review Group
  www.nichd.nih.gov/cochrane
- National Scientific Council on the Developing Child
  www.developingchild.net
- Neonatology on the Web
  www.neonatology.org

Find out more: these websites may be helpful

- American Academy of Pediatrics
  www.aap.org/parents
- National Institute of Child Health and Human Development
  www.nichd.nih.gov/health/education
- Medline Plus®
  www.nlm.nih.gov/medlineplus
- Early Head Start National Resource Center
  www.ehsnrc.org

This information is for educational purposes only and is not intended to substitute for professional medical advice. Always consult with a health care professional if you have any questions about the health of your baby.

F7 - Babies born with low blood sugar (hypoglycemia)