

# Protecting your baby from low blood glucose

**This leaflet will give you information about how to protect your baby from hypoglycaemia (low blood sugar), and suggest ways of dealing with an episode if it happens. If you have further questions or concerns, please speak to the midwife caring for your baby.**

## What is low blood glucose?

You have been given this leaflet because your baby is at increased risk of having low blood glucose (also called low blood sugar or hypoglycaemia).

Babies who are small, premature (born before 37 weeks gestation), or whose mothers are diabetic or taking Beta blockers, may have low blood glucose in the first few hours and days after birth. It is very important for these babies to be highlighted to midwives, and to be kept warm and fed regularly in order to maintain normal blood glucose levels.

It is recommended that they have some blood tests to check their blood glucose level. This will continue until they are stable, but at least they are eight hours old. Extremely low blood glucose, if not treated, can cause brain injury resulting in developmental problems. If low blood glucose is identified quickly, it can be treated to avoid harm to your baby.

This is why we have a **RED HAT** BABY PATHWAY – whereby the red hat highlights your baby for close monitoring and also helps to keep baby warm. Please ensure your baby wears the red hat (unless it is extremely hot in summer) and display the red hat sign on your baby's cot until the midwives tell you it is safe to stop. This will be once your baby's blood glucose levels and temperature are stable.

**Once your baby's temperature has stabilised, it is no longer recommended that they wear a hat indoors due to risk of SIDS** (see Department of Health and UNICEF leaflets in your postnatal pack).

## Blood glucose testing

Your baby's blood glucose is tested by a heel prick blood test. A very small amount of blood is needed and it can be done while you are holding your baby in skin-to-skin contact. The first blood test should be done before the second feed (two to four hours after birth), and repeated before every feed until the blood glucose levels are stable for two consecutive (one after the other) tests. Please let your midwife know when you are planning to feed your baby so that the blood test can be done at the correct time.

You and your baby will need to stay in hospital for the blood tests. You will know the result of each test straight away.

## How to avoid low blood glucose

- **Skin-to-skin contact** with your baby on your chest helps keep your baby calm and warm and helps establish breastfeeding. During skin-to-skin contact, your baby should wear a hat and be kept warm with a blanket or towel.
- **Keep your baby warm** – put our **RED HAT** on your baby for the first few days while they are in hospital. Keep your baby in skin contact on your chest covered with a blanket and look into your baby's eyes to check that they are well in this position, or keep warm with blankets if left in a cot.
- **Feed as soon as possible after birth** – ask a member of staff to support you with feeding until you are confident, and make sure you know how to tell if breastfeeding is going well, or how much formula to give to your baby.
- **Feed as often as possible in the first few days** – whenever you notice feeding cues, (rapid eye movements under the eyelids, mouth and tongue movements, body movements and sounds, sucking on a fist), offer your baby a feed. Don't wait for your baby to cry – this can be a late sign of hunger.
- **Feed for as long, or as much, as your baby wants.**
- **Feed as often as your baby wants**, but do not leave your baby more than three hours between feeds.
- **Express your milk (colostrum).** If you are breastfeeding and your baby struggles to feed, try to give some expressed breast milk. A member of staff will show you how to hand express your milk, or watch the hand expression videos (details are listed at the end of this leaflet). If possible, it is good to have a small amount of expressed milk saved in case you need it later, so try to express a little extra breast milk in between feeds.
- **Antenatal hand expressing.** If you know while you are pregnant, that your baby will be at risk of hypoglycaemia, you might want to consider trying to express some colostrum antenatally (before birth). This will make sure you are confident in the skill of hand expressing and might provide some colostrum for you to bring in if baby is slow to establish feeding. Ask for a copy of our leaflet, **Antenatal hand expressing from 37 weeks**, and ask your midwife for support.

### Do not hesitate to tell staff if you are worried about your baby.

The following are signs to check that your baby is well:

- **Is your baby feeding well?** In the first few days, your baby should feed effectively at least every three hours, until blood glucose is stable, then at least eight times in 24 hours. Ask a member of staff how to tell if your baby is attached and feeding effectively at the breast, or how much formula your baby needs. If your baby becomes less interested in feeding than before, this may be a sign they are unwell and you should raise this with a member of staff.
- **Is your baby warm enough?** Your baby should feel slightly warm to touch, although hands and feet can sometimes feel a little cooler.
- **Is your baby alert and responding to you?** When your baby is awake, they will look at you and pay attention to your voice and gestures. If you try to wake your baby they should respond to you in some way.
- **Is your baby's muscle tone normal?** A sleeping baby is very relaxed but should still have some muscle tone in their body, arms and legs should respond to your touch. If your baby feels completely floppy, with no muscle tone when you lift their arms and legs, or if your baby is making strong, repeated, jerky movements, this is a sign they may be unwell. It can be normal to make brief, light jerky movements. Ask a member of the team if you are not sure about your baby's movements.

- **Is your baby's colour normal?** Look at the colour of the lips and tongue – they should be pink.
- **Is your baby breathing easily?** Babies' breathing can be irregular, sometimes pausing for a few seconds and then breathing very fast for a few seconds. If you notice your baby is breathing very fast for a continuous period (more than 60 breaths per minute), or seems to be struggling to breathe with very deep chest movements, nostrils flaring or making noises with each breath out – this is not normal.

## What happens if your baby's blood glucose is low?

If the blood glucose is low, your baby should feed as soon as possible and get skin-to-skin contact. If you are breastfeeding and your baby does not breastfeed straight away, a member of staff will review your baby to work out why. If they are happy that your baby is well, they will support you to hand express your milk and give it by oral syringe, finger or cup. If your baby has not breastfed and you have been unable to express your milk, we can give some glucose (a type of sugar) oral gel as this can be an effective way of bringing up the blood glucose level. A top up of formula may also be advised. If you are breastfeeding and advised to give some infant formula, this is most likely to be only for one or a few feeds. You should continue to offer breastfeeds and try to express milk as often as possible to ensure your milk supply is stimulated.

If the blood glucose level is very low, your baby is too sleepy or unwell to feed, or if the blood glucose is persistently low despite the above treatments, the neonatal team may advise urgent treatment to raise the blood glucose level and this could require immediate transfer to the neonatal unit until your baby's blood glucose is stable.

## Useful sources of information

Global health media videos Expressing the First Milk (Small baby series) although this is designed for mothers of small babies, this is a very good video for anyone who wants to know about hand expressing. Please note that we will give you syringes to collect your colostrum rather than spoons.

Or try

[www.unicef.org.uk/babyfriendly/baby-friendly-resources/video/hand-expression/](http://www.unicef.org.uk/babyfriendly/baby-friendly-resources/video/hand-expression/)

Information on feeding your baby

[www.gstt.nhs.uk/breastfeeding](http://www.gstt.nhs.uk/breastfeeding)

## Contact us

**e:** [breastfeedingteam@gstt.nhs.uk](mailto:breastfeedingteam@gstt.nhs.uk),

**t:** 020 7188 7564 or your allocated antenatal midwives (see the front of your maternity notes for details) or your community midwives once you are at home.

Please contact NHS 111 or your GP if you have any further concerns about your child after you go home.

Please call 999 or go to your nearest Emergency Department (A&E) for emergencies.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.gstt.nhs.uk/breastfeeding](http://www.gstt.nhs.uk/breastfeeding) or [www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

## Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

**t:** 020 7188 3003, Monday to Friday, 10am to 5pm **e:** [letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@gstt.nhs.uk)

## Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

**t:** 020 7188 8801 (PALS) **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)  
**t:** 020 7188 3514 (complaints) **e:** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

## Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. **t:** 020 7188 8815 **e:** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)

## NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111

## NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health. **w:** [www.nhs.uk](http://www.nhs.uk)

## Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member: **t:** 0800 731 0319 **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk) **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)

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