



Hypoglycaemia

Whānau/Family Information – Neonatal Services

What is hypoglycaemia in the newborn pēpi/baby?

Hypoglycaemia is when the level of sugar (glucose) in the blood is too low. Blood glucose is a sugar that moves through the bloodstream and provides energy to all the cells in the body. It is one of your pēpi most important sources of energy.

Pēpi with normal blood glucose levels (2.6 mmol/L or above) have the energy they need for healthy brain, muscle growth and development.

However, in some rare cases blood glucose levels can fall too low and cause brain injury, neurodevelopment delay or death.

Where do pēpi get glucose?

Pēpi get glucose through the placenta and umbilical cord while in their Māmā /mother's uterus (womb). Some of that glucose is used right away as energy and some is stored for after birth.

After being born, breastmilk becomes the main source of sugar for your pēpi.

The sugar in milk changes to glucose in the body. When this happens, your pēpi will also start to store glucose for use between feeds.

Are some pēpi more likely to have hypoglycemia?

Yes, especially if:

- Preterm (born before 37 weeks of pregnancy).
- Māmā has diabetes (especially if needing insulin or have diabetes that is not well controlled).
- Pēpi who are large or small for the number of weeks you have been pregnant.
- Body under stress due to requiring resuscitation after being born, or cold (low body temperature); stress causes more glucose to be used.
- Unwell, eg. have an infection.
- Born with a health problem that is known to cause low blood glucose, eg. birth defects, metabolic diseases.

Signs of hypoglycemia

Signs of hypoglycemia can include the below, though these vary with every pēpi and some pēpi may not show any signs.:

- Not feeding well
- Sleepy
- Irritable
- Jitteriness
- Limp arms and legs

If your pēpi has any of the above signs, or at risk of having a low blood sugar level, a small drop of blood will be taken from your pēpi heel. If this shows a low blood sugar level, further heel pricks will be taken (usually before a feed) until the blood sugar remains at a normal level with the usual amount of feeds for a newborn pēpi (breast or bottle with no extra feeds).

What can be done to prevent hypoglycemia?

- Keep pēpi warm after birth by skin-to-skin contact (this does depend on pēpi condition)
- Feed pēpi as soon as possible after birth (within around 30 minutes)
- Offer frequent feeds at least 3-hourly or more frequently.

What is the treatment for hypoglycemia?

Treatment depends on how low your pēpi blood sugar level is. In some cases, frequent feeding is enough to improve the level. In other cases, your pēpi may need:

- Extra expressed breastmilk
- Glucose gel that is placed in your pēpi mouth

If the blood sugar is very low, your pēpi is unwell or despite feeding, the blood sugar level remains low, glucose may be given by an intravenous line (drip) placed in your pēpi hand or foot, to bring the blood sugar up to within a healthy range.

Usually, low blood sugar levels will only last for a few hours but can last up to 24-72 hours. Once your pēpi levels become normal, he/she shouldn't have further problems with hypoglycaemia.

In very rare cases, low blood sugar can be severe or last a long time. If this happens, your doctor will do special tests to look for other causes.

If you have concerns or want more information about your pēpi, please ask the doctor or nurse providing your pēpi care.

