

# Glucose 40%

Newborn use only

2019

<b>Alert</b>	40% glucose, on average, raises blood glucose by 0.4 mmol/L (95% CI -0.14–0.14) <sup>2</sup> and should not be used alone in the treatment of moderate to severe hypoglycaemia. This can be a nurse initiated medication according to the local hospital guideline. <b>DO NOT squirt gel directly into the baby's mouth to avoid choking.</b>
<b>Indication</b>	Prevention and treatment of mild hypoglycaemia in neonates <b>≥35 weeks' gestation and &lt;48 hours of life</b> <sup>1,2</sup>
<b>Action</b>	Glucose gel contains glucose, a simple carbohydrate, in concentrated aqueous solution, which can be administered by direct application to mucosal surfaces of the mouth, including buccal and lingual surfaces. Absorption from these sites may allow rapid access to the circulation. Some proportion of the dose may be swallowed and absorbed from the gastrointestinal tract. <sup>2</sup>
<b>Drug Type</b>	Glucose 40%.
<b>Trade Name</b>	Glucose 40% Oral Gel (Glucose15) 40% glucose <b>solution</b> in oral syringe by Baxter (glucose syringe product GLR.082)
<b>Presentation</b>	<b>Glucose15 Oral Glucose Gel:</b> 15 g of glucose / 37.5 g tube. 200 mg of glucose gel 40% is equivalent to 0.5 mL. Lemon flavoured. Contains citric acid monohydrate, water, dextrose, glycerin, methylparaben, potassium sorbate, propylparaben, carboxymethylcellulose, sodium citrate.  <b>40% glucose in Water for Injection</b> supplied in 2 mL oral syringe by Baxter (glucose syringe product GLR.082).
<b>Dosage/Interval</b>	0.5 mL/kg/dose (200 mg/kg/dose). <sup>3</sup> Doses can be repeated as per the local hospital guidelines. 1 mL/kg/dose (400 mg/kg/dose) as a single dose has also been used. <sup>5</sup>
<b>Route</b>	ORAL
<b>Maximum Daily Dose</b>	1.5 mL/kg
<b>Preparation/Dilution</b>	
<b>Administration</b>	This can be a nurse initiated medication according to the local hospital guideline.  <b>Glucose 40% Oral Gel (single use only)</b> <ol style="list-style-type: none"><li>1. Draw up required dose of gel slowly in an oral-only 5 mL syringe.</li><li>2. Dry baby's mouth with gauze. DO NOT squirt gel directly into the baby's mouth.</li><li>3. Dispense one-half of the dose from oral syringe onto gloved finger</li><li>4. Massage into the buccal mucosa of one cheek.</li><li>5. Repeat with remaining half-dose inside the other cheek.</li><li>6. Large doses may be divided into 4 equal amounts and given alternating between cheeks.</li><li>7. Commence breastfeeding or administer expressed breast milk or formula.</li><li>8. Discard the unused portion of the gel.</li></ol> <b>Glucose 40% Syringe (Baxter)</b> <ol style="list-style-type: none"><li>1. Wearing a clean glove, gently dry the infant's buccal mucosa with gauze.</li><li>2. Instil the prescribed dose slowly into the side of the mouth onto the buccal mucosa and massage it in with a gloved finger.<sup>6</sup></li><li>3. Commence breastfeeding or administer expressed breast milk or formula.</li><li>4. Discard the unused portion.</li></ol>
<b>Monitoring</b>	Measure blood glucose 30 minutes after administration and subsequent management is as per the hospital guideline.
<b>Contraindications</b>	No information.
<b>Precautions</b>	<35 weeks gestation; infants at risk of aspiration or in whom feeds are contraindicated.
<b>Drug Interactions</b>	No information.
<b>Adverse Reactions</b>	Risk of aspiration if the gel is squirted directly into mouth.
<b>Compatibility</b>	No information.
<b>Incompatibility</b>	No information.
<b>Stability</b>	12-month shelf life. Check the expiry date prior to administration.
<b>Storage</b>	Baxter syringe: stable at room temperature for 90 days.

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<b>Special Comments</b>	40% glucose, on average raises blood glucose level by 0.4 mmol/L (95% CI -0.14–0.14). <sup>2</sup>
<b>Evidence summary</b>	Refer to full version.
<b>References</b>	Refer to full version.

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