

Sucrose 24% - Medication Administration

Oral Sucrose 24% is used as an analgesic agent to reduce procedural pain for neonates and infants during minor procedures. The administration of Sucrose 24% requires a medication order and parental consent. Sucrose can be used up to 18 months of age. It is important to note that breastmilk can also be used for procedural pain and should be considered in neonates.

Examples of procedures where Sucrose 24% administration may be considered

- heel prick bloods
- peripheral intravenous catheter insertion
- nasogastric tube insertions
- urinary catheterisation
- lumbar puncture
- dressing changes
- intramuscular injections

Contraindications

- not undergoing a painful procedure
- known sucrose/fructose intolerance
- risk of necrotising enterocolitis
- ventilated or risk of aspiration
- altered swallow/gag/suck
- unrepaired oesophageal atresia or tracheo-oesophageal fistula
- infants less than one week of age whose mothers were exposed to opioids at time of birth (including illicit or opioid replacement)

Recommended Dosing*

Preterm infant (postmenstrual age 32–40 weeks)	oral 0.2–0.5 mL per procedure; maximum 2.5 mL in 24 hours.
Birth (at term) – 1 month,	oral 0.5–1 mL per procedure; maximum 5 mL in 24 hours.
1–18 months	oral 1–2 mL per procedure; maximum 5 mL in 24 hours, if aged <3 months, or 10 mL in 24 hours if >3 months.

Dosing from AMH Children's Companion, "[Sucrose 24%](#)" retrieved 22 May 2024

*This is provided for general information purposes only. It is not intended as a resource to prescribe doses from. Please check the AMH at the time of medication for administration, as this is subject to change.

Oral Sucrose Administration

- The sucrose dose should be administered incrementally over the duration of the procedure.
- The first increment should be given 2 minutes before the procedure commences.
- Oral sucrose should be used in conjunction with other supportive measures e.g. holding, cuddling or distraction (in older infants)



ALERT

Sucrose does not replace the need for simple analgesia, local anaesthetics or narcotic analgesia for more painful, longer procedures.



Sucrose 24% is only effective when given orally. Do not give directly into the stomach via enteral devices.

- The efficacy of sucrose is improved if it is used in conjunction with a pacifier and if the infant is held throughout the procedure by their caregiver.
- The analgesic effect of Sucrose 24% lasts 5-8 minutes.
- Oral Sucrose 24% given to neonates for procedural pain management within the recommended dosing does not alter blood glucose levels (BGLs).

For further information:

[Australian Medicines Handbook - Children's Dosing Companion - Sucrose 24%](#)

References:

Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), Pharmaceutical Society of Australia (PSA) & Royal Australian College of General Practitioners (RACGP). (2024). Sucrose 24%. Australian Medicines Handbook: Children's Dosing Companion. Retrieved 22 May 2024 from <https://childrens.amh.net.au/monographs/sucrose>.

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Skill Sheet Disclaimer

The information contained in these Queensland Paediatric Emergency Care skill sheets is for information purposes only. It was developed to inform emergency nursing care, but can also be applied by other clinicians acting within their scope of practice. The information has been prepared using a multidisciplinary approach with reference to the best information and evidence available at the time of preparation. No representation, warranty or assurance is given that the information is entirely complete, current, or accurate in every respect. The skill sheets are not a substitute for clinical judgement, knowledge and expertise, or medical advice. Variation from the skill sheets, taking into account individual circumstances may be appropriate. This does not address all elements of standard practice and accepts that individual clinicians are responsible for the following:

- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

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