

Trial of Fluids

What is a trial of fluids?

An oral trial of fluids is commenced by clinicians for children with gastroenteritis who are not dehydrated, but should demonstrate they can tolerate oral intake prior to their discharge home. Some facilities may utilise the [Clinical Pathway: Management of children >9 months presenting with acute vomiting \(<72hrs\)](#) to screen patients prior to commencing a trial of fluids.

Red Flags

The following are cause for concern

- Fingerprick BGL $<3.0\text{mmol}$, formal BGL $<2.6\text{mmol}$
- Severe dehydration with shock
- Decreased LOC, pale or mottled skin, cold peripheries, weak peripheral pulses, central CRT $>2\text{secs}$, hypotension
- Child appears toxic
- Bilious (green) or blood stained vomits
- Bloody stools/malaena
- Abdominal distension
- Significant abdominal pain



ALERT

If any red flags are identified, you must consult with a senior medical officer prior to commencing a trial of fluids.

What to offer?

Oral rehydration solutions (ORS) are recommended as they contain the right balance of glucose and sodium. The brands of ORS on imprest may vary from hospital to hospital; each contains a slightly different recipe. Some children will not tolerate ORS. Apple juice diluted with water using a 50:50 ratio or ice blocks are viable alternatives. It is important however, to note that these do not offer electrolytes.

What fluids should be avoided?

High sugar content drinks such as soft drinks or cordials at their usual strength are not recommended as a rehydration fluid, as they have minimal sodium content. Water alone is also not recommended.

How much to offer and how frequently?

It is recommended that small amounts of oral rehydration are offered. The recommended amount is 10mL/kg over 60 minutes. This volume is then broken down into aliquots to be offered 5 minutely. Round the calculated volume up to the nearest mL. For example, if you have a 20 kg child you would ask the caregiver to offer 200mL over 1 hour, which would equate to approximately 17mL every 5 minutes.

Weight	Oral intake over 60 mins (mL)	Oral intake over 5 mins (mL)
8kg	80	7
9kg	90	7.5
10kg	100	8.5
12kg	120	10
15kg	150	12.5
20kg	200	17
25kg	250	21
30kg	300	25
35kg	350	30
40kg	400	33
50kg	500	42
60kg	600	50

How can carers keep track of how much their child has taken?

Your hospital may have a dedicated paediatric trial of fluids form, if so give this to parents to help them keep track. If not you can access the [Children's Health Queensland: Trial of Fluids](#) Form via QHEPS.



For further information:

[Queensland Paediatric Guideline: Gastroenteritis - Emergency management in children](#)

[Clinical Pathway: Management of children >9 months presenting with acute vomiting \(<72hrs\)](#)

References:

Children's Health Queensland Hospital and Health Service. (2022, August 23). Intravenous Fluid Guidelines - Paediatric and Neonatal. https://qheps.health.qld.gov.au/_data/assets/pdf_file/0025/705670/gdl-01025.pdf

Children's Health Queensland Hospital and Health Service. (2023, March 2). Gastroenteritis - Emergency management in children. <https://www.childrens.health.qld.gov.au/guideline-gastroenteritis-emergency-management-in-children/>

Children's Health Queensland Hospital and Health Service. Clinical Pathway: Management of children >9 months presenting with acute vomiting (<72hrs). Document number 00007:800198_v1.00_06202. Retrieved 8 February 2023 from https://qheps.health.qld.gov.au/_data/assets/pdf_file/0038/2845829/800198.pdf

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- 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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