

ZINC ORAL DROPS

Trade Name	Clinicians Zinc Oral Drops
Class	Mineral Supplement
Mechanism of Action	<p>Zinc is a cofactor involved in several different enzyme reactions associated with protein and carbohydrate metabolism. Zinc helps to maintain normal growth and tissue repair, normal skin hydration, and the senses of taste and smell.</p> <p>Dietary zinc deficiency is known to inhibit growth in children.</p> <p>Zinc is also an antioxidant.</p>
Indications	<p>Indication 1: Supplement</p> <p>Indication 2: Treatment of deficiency</p>
Contraindications	<p>Family history of allergy to zinc.</p> <p>Avoid direct intramuscular or intravenous injection due to risk of tissue irritation.</p>
Supplied As	Clear solution containing elemental Zinc 1mg/drop
Dilution	NIL
Dosage	<p>Indication 1: 0.4mg/kg/day</p> <p>Indication 2: 1– 2mg/kg/day</p> <p>(doses of up to 5mg/kg/day may be needed for management of acrodermatitis enteropathica)</p> <p>Round the dose to the nearest 1mg (ie: the drop size) but if you round down ensure that the baby is not under-dosed</p>
Interval	Single dose once a day.
Administration	Oral: via nasogastric tube or orally with or after a feed
Compatible With	Not applicable
Incompatible With	See interactions box
Interactions	<p>Oral zinc supplements reduce absorption of quinolone antibiotics eg ciprofloxacin</p> <p>Concomitant zinc and copper supplementation may decrease absorption of either or both of these metals. Space administration times as far apart as possible.</p> <p>Concomitant zinc and iron administration may decrease absorption of both of these metals. Space administration times by at least 2 hours.</p>

Monitoring	<p>Prolonged use of zinc may lead to copper deficiency</p> <p>Consider checking a Zinc level in an ELBW infant with significant oedema as Zinc deficiency can be a cause.</p> <p>Check a level if there is severe nappy rash that could be consistent with acrodermatitis enteropathica.</p> <p>Consider checking the level of an infant with unexpected poor growth, especially those with CLD</p> <p>Normal range for zinc levels are 10-17 micromol/L</p>
Stability	6 months after opening or manufacturers expiry whichever is shortest
Storage	Room temperature; ensure the cap is tightly replaced after use
Adverse Reactions	<p>Incidence <1%</p> <p>Hypotension, indigestion, jaundice, leukopaenia, neutropaenia, nausea, diarrhoea, vomiting, pulmonary oedema, oliguria.</p>
Metabolism	<p>Bioavailability = 20-30%</p> <p>Elimination = faeces 67%; renal 2%</p>
Comments	The elemental zinc present in Clinicians Zinc Drops is derived from zinc sulphate, other excipients in these drops include sterile water, citric acid, sodium citrate and potassium sorbate.
References	<ol style="list-style-type: none"> 1. Martindale Extrapharmacopoeia 2004 2. Mayne Pharma Product Data Sheet for Zinc Chloride Inj 3. Micromedex 4. Tsang Consensus Recommendations 5. www.nzf.org.nz 6. Nutritional Care of Preterm Infants 2nd Edition Vol 122 World review of Nutrition & Dietetics
Updated By	A Lynn, B Robertshawe September 2022 (new product introduced whilst Zinc chloride out of stock)