



COLECALCIFEROL

Read in conjunction with **Disclaimer**

Formulary: Unrestricted									
P	resentation	Oral Solution: 1000 units/0.2 mL (5000 units/mL)							
٢	Drug Class	Vitamin D supplement							
		Prophylaxis of vitamin D deficiency for infants as per below table:							
Indication		Corrected Gestational Age	Corrected Feed type Gestational Age						
		Less than 35 weeks	All	Yes					
		35 weeks and	Unfortified breastmilk	Yes					
		greater	Full feeds of formula or fortified breastmilk	No					
		 For infants with a Vitamin D (25 Hydroxy Serum) level less than 50 nmol/L. Neonatal cholestasis. Treatment of nutritional rickets. 							
ORAL	Presentation	Oral Solution: 1000 units/0.2 mL (5000 units/mL)							
	Dosage	Prophylaxis of vitamin D deficiency 500 units once daily. Commence when infant has reached full feeds. It is recommended to continue supplementation until at least 6 months of age.							
		Treatment of vitamin D deficiency 1000 units once daily.							
		Neonatal cholestasis 1000 units once daily.							
		Treatment of nutritional rickets 2000 units once daily for at least 3 months.							
	Administratior	 Draw prescribed dose into oral/enteral syringe. Can be given Oral/OGT/NGT. Can be given at any time with regards to feeds. 							

	For preterm infants monitor vitamin D level with bone bloods as per CAHS Neonatology Blood Tests: Ordering Guideline.						
	Level (nmol/L)	Range	Action				
	30 or less	Severely low	Treatment for vitamin D deficiency				
	30 to 50	Low	dose.				
	50 to 200	Target range	Remain on prophylaxis dose.				
Monitoring	Higher than 200	High	 Cease Supplementation. Perform dipstick of urine daily. If large amount of blood (3+) on two samples; organise for renal ultrasound. If renal ultrasound identifies renal calculi discuss with renal physician and paediatric urologist. 				
	Neonatal cholestasis: Check vitamin D level at 1 and 3 months.						
Monitoring	Symptoms or vitamin D toxicity: Poor feeding, vomiting, diarrhoea, weight loss, polyuria, sweating, irritability, elevated plasma calcium and phosphate in plasma and urine.						
Sido Effonto	Common: Nil						
Side Effects	Serious: Hypercalcaemia, nephrocalcinosis						
Storage	Store at room temperature, below 25°C.						
Comments	 Prophylactic doses can range from 400 to 500 units, depending on the colecalciferol product/brand used. Pentavite[®] contains 400 units of colecalciferol per 0.45 mL dose. Breast milk fortifiers and term and preterm formulas contain varying amounts of Vitamin D (Colecalciferol). Consult dietitian for further advice if required. 						

Related Policies, Procedures, and Guidelines

Clinical Practice Guidelines:

- CAHS Neonatology Blood Tests: Ordering Guideline
- CAHS Neonatology Parenteral Nutrition Guideline

WNHS Obstetrics and Gynaecology Vitamin D Deficiency in Pregnancy

References

AusDI. OsteVit-D Liquid. In: AusDI By Medical Director [Internet]. Australia: AusDI by Medical Director; 2024 [cited 2024 Nov 21]. Available from: <u>https://www.ausdi.com/</u>

British National Formulary. BNF for Children. 2023-2024 ed. London, UK: BMJ Group and Pharmaceutical Press; 2023. p. 733.

Munns CF, Shaw N, Kiely M, Specker BL, Thacher TD, Ozono K, et al. Global consensus recommendations on prevention and management of nutritional rickets. J Clin Endocrinol Metab. 2016 Feb;101(2):394-415. doi: 10.1210/jc.2015-2175.

Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Vitamin and mineral supplementation in pregnancy. Melbourne: RANZCOG; 2023. Available from: https://ranzcog.edu.au/wp-content/uploads/Vitamin-Mineral-Supplementation-Pregnancy.pdf

Truven Health Analytics. Cholecalciferol. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2024 [cited 2024 Nov 21]. Available from: https://www.micromedexsolutions.com/neofax

U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th ed. Washington, DC: U.S. Government Publishing Office; December 2020. Available from:

https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf

Document history

Keywords	Vitamin D, Vit D, colecalciferol, cholecalciferol								
Document Owner:	Chief Pharmacist								
Author/ Reviewer	KEMH & PCH Pharmacy/Neonatology Directorate								
Version Info:	 V4.0 – full review, new template, changes made to align with updated obstetric guidelines, prophylaxis dose for all babies who are not receiving enough supplementation in their feeds. V4.1 – changes to indication and duration of prophylaxis (March 2025) 								
Date First Issued:	2011	Last Reviewed:	19/11/2024		Review Date:	19/11/2029			
Endorsed Neonatal Directorate Management G		te Management Grou	qr		Date:	14/03/2025			
NSQHS Standards Applicable:	Std 1: Clinical Governance			Std 4: Medication Safety					
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from WNHS HealthPoint.									

This document can be made available in alternative formats on request for a person with a disability.

© North Metropolitan Health Service 2024