

Alert	Vitamin A is expressed as microgram retinol activity equivalents (RAE) or international units (IU) or units. 1 microgram RAE = 1 microgram retinol = 3.3 units of retinol. ⁽³⁾ 1 microgram colecalciferol = 40 international units (or units) of vitamin D3. ⁽³⁾ Pentavite doesn't contain folic acid, B12 and vitamin E.															
Indication	Routine supplementation in preterm or low birthweight infants Suggested age group: <37 weeks and/or birthweight <2.5 Kg. Cholestasis															
Action	Multivitamin supplement															
Drug type	Multivitamin															
Trade name	Pentavite Infant liquid 0-3 years															
Presentation	Oral liquid Each 0.45 mL contains: <table><tr><td>Vitamin A</td><td>Retinol palmitate 0.723 mg (390 microgram Retinol Equivalents)</td></tr><tr><td>Vitamin B1 (Thiamine)</td><td>540 microgram</td></tr><tr><td>Vitamin B2 (riboflavin)</td><td>810 microgram</td></tr><tr><td>Vitamin B3 (nicotinamide)</td><td>7.1 mg</td></tr><tr><td>Vitamin B6 (pyridoxine)</td><td>111 microgram</td></tr><tr><td>Vitamin C (ascorbic acid)</td><td>42.8 mg</td></tr><tr><td>Vitamin D3 (colecalciferol)</td><td>10.1 microgram (400 units)</td></tr></table>		Vitamin A	Retinol palmitate 0.723 mg (390 microgram Retinol Equivalents)	Vitamin B1 (Thiamine)	540 microgram	Vitamin B2 (riboflavin)	810 microgram	Vitamin B3 (nicotinamide)	7.1 mg	Vitamin B6 (pyridoxine)	111 microgram	Vitamin C (ascorbic acid)	42.8 mg	Vitamin D3 (colecalciferol)	10.1 microgram (400 units)
Vitamin A	Retinol palmitate 0.723 mg (390 microgram Retinol Equivalents)															
Vitamin B1 (Thiamine)	540 microgram															
Vitamin B2 (riboflavin)	810 microgram															
Vitamin B3 (nicotinamide)	7.1 mg															
Vitamin B6 (pyridoxine)	111 microgram															
Vitamin C (ascorbic acid)	42.8 mg															
Vitamin D3 (colecalciferol)	10.1 microgram (400 units)															
Dose	<u>Routine supplementation in preterm or low birthweight infants</u> 0.45 mL daily. NOTE: Dose not based on weight. Continue up to 12 months corrected age. Suggested regimen: (1) To be commenced/given when the infant is tolerating ≥ 120 mL/kg/day of enteral feeds. Note: If pentavite is not available, suggested preparations: Brauer Baby Multivitamin liquid 1 mL DAILY + Ostelin vitamin D3 (1000 IU/0.5 mL) Liquid 0.2 mL DAILY. DOSE NOT BASED ON WEIGHT. <u>Cholestasis</u> Refer to Vitamins in cholestasis formulary.															
Dose adjustment																
Maximum dose	0.45 mL DAILY for routine supplementation 0.45 mL BD for cholestasis															
Route	Oral or intra-gastric tube															
Preparation	No preparation required															
Administration	Shake the bottle. Administer undiluted or mixed with a small amount of milk into infant's mouth through a feeding teat or via intra-gastric tube.															
Monitoring																
Contraindications	Not yet tolerating enteral feeds															
Precautions	Direct administration into the mouth may cause choking and apnoea															
Drug interactions																
Adverse reactions																
Overdose	AUSTRALIA: Contact the Poisons Information Centre on 13 11 26 for information on the management of overdose NEW ZEALAND: Contact the National Poisons Centre on 0800 764 766 for information on the management of overdose.															
Compatibility	Not applicable.															
Incompatibility	Not applicable.															
Stability	Use within 9 weeks after opening.															
Storage	Store below 25°C. Refrigerate after opening. Protect from light.															
Excipients	Sodium saccharin, pineapple flavour															
Special comments																

	Comparison of pentavite and Baby Multivitamin Liquid		
	Pentavite 0.45 mL		Brauer 1 mL
	Vitamin A	390 microgram	
	Betacarotene		645 microgram
	Vitamin D3	10.1 microgram	200 units (equiv. to 5 microgram colecalciferol)
	Vit. B1	540 microgram	100 microgram
	Vit. B2	810 microgram	150 microgram
	Nicotinamide	7.1 mg	1 mg
	Vit. B6	111 microgram	100 microgram
	Vit. B12		0.417 microgram
	Folic acid		
	Vitamin C	42.8 mg	7.5 mg
	Vit. E		4.04 mg
	Choline		37.5 mg
	Biotin		1.5 microgram
Evidence	<p>No studies were located which examined the impact of multivitamin supplementation on any outcomes in low birth weight (LBW) infants.</p> <p>Policy statements from organisations in developed countries recommend providing multivitamin supplementation with a neonatal multivitamin preparation containing vitamins A, D, C, B1, B2, B6, pantothenic acid and niacin to all LBW infants receiving human milk from birth until the infant attains a weight of 2000 g.</p> <p>Many units provide a multivitamin preparation to all LBW infants until 6 to 12 months chronological age.</p> <p>Vitamin D – There is evidence of reduced linear growth and increased risk of rickets in babies with a birth weight < 1500 g fed un-supplemented human milk. There is no consistent benefit of increasing the intake of vitamin D above 400 units per day.</p> <p>There are no clinical trial data on the effect of vitamin D on key clinical outcomes in infants with a birth weight > 1500 g.</p>		
Practice points	<p>Pentavite® contains vitamin D, it may be used for later preterm or term infants at risk of vitamin D deficiency. However, this may be better managed using single ingredient vitamin D preparations (see Colecalciferol formulary).</p> <p>For preterm infants the dose may be halved (i.e. 0.23 mL) and given twice daily to improve tolerability. Infants with cholestasis should receive additional vitamin D supplementation until cholestasis/fat malabsorption resolves (see Colecalciferol formulary). Other fat soluble vitamins may also require supplementation.</p>		
References	<ol style="list-style-type: none"> 1. Product Information: Penta-Vite Multivitamins Oral Liquid. MIMSONline. Accessed 18/07/2014. 2. Optimal feeding of low-birth-weight infants, technical review. Karen Edmond, MBBS, MSc (Epidemiology), PhD. London School of Hygiene and Tropical Medicine, London, U.K. Rajiv Bahl, MD, PhD. Department of Child and Adolescent Health and Development, WHO, Geneva. 3. https://dietarysupplementdatabase.usda.nih.gov/Conversions.php. Accessed on 17 November 2021. 4. https://www.pentavite.com/product/multivitamin-infant-liquid/. Accessed 04/07/2022. 		

VERSION/NUMBER	DATE
Original 1.0	08/08/2015
Revised 2.0	16/11/2020
Revised 3.0	18/07/2022
Version 3.0 (Minor errata)	23/11/2023
Version 3.0 (Minor errata)	11/07/2024
Current 4.0	17/07/2025

REVIEW	17/07/2030
---------------	------------

Authors Contribution – Current version

Current author/s	Nilkant Phad, Srinivas Bolisetty
Evidence Review	
Expert review	
Nursing Review	Eszter Jozsa, Bryony Malloy
Pharmacy Review	Thao Tran, Mohammad Irfan Azeem
ANMF Group contributors	Bhavesht Mehta, Rebecca Barzegar, Mohammad Irfan Azeem, Rebecca O’Grady, Cindy Chen, Thao Tran, Celia Cunha Brites, Kerrie Knox, Susannah Brew, Bryony Malloy, Renae Gengaroli, Samantha Hassall, Jutta van den Boom, Amber Seigel, Tiffany Kwan, Charles Tian, Emma Watson
Final editing	Srinivas Bolisetty
Electronic version	Thao Tran, Cindy Chen, Helen Huynh, Ian Callander
Facilitator	Srinivas Bolisetty