Pentavite
Newborn use only

2022

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]
Indication	Prevention of vitamin deficiency in infants born < 35 weeks gestation or < 2 kg birth weight
Action	Multivitamin supplement
Drug type	Multivitamin
Trade name	Pentavite Infant liquid 0-3 years
Presentation	Oral liquid Each 0.45 mL contains:

Vitamin A (from retinol palmitate 714 microgram)	390 microgram RAE (1287 units of retinol)
Vitamin B1 (as thiamine hydrochloride)	540 microgram
Vitamin B2 (riboflavin) (from riboflavine sodium phosphate 1.1 mg)	810 microgram
Vitamin B3 (nicotinamide or niacin)	7.1 mg
Vitamin B6 (pyridoxine) (from pyridoxine hydrochloride 135 microgram)	111 microgram
Vitamin C (ascorbic acid)	42.8 mg
Vitamin D (colecalciferol)	10.1 microgram (400 units)

Dose	**Routine supplementation in preterm or low birthweight infants** 0.45 mL daily. **NOTE: Dose not based on weight.** Continue up to 12 months corrected age. **Cholestasis** Refer to Vitamins in cholestasis formulary.
Dose adjustment	
Maximum dose	0.45 mL
Total cumulative dose	
Route	Oral or intra-gastric tube
Preparation	No preparation required
Administration	Do not 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 full feeds
Precautions	Direct administration into the mouth may cause choking and apnoea
Drug interactions	
Adverse reactions	
Compatibility	
Incompatibility	
Stability	Use within 9 weeks after opening.
Storage	Store below 25°C. Protect from light. Refrigerate after opening.
Excipients	Sodium saccharin, pineapple flavour
Special comments	
Evidence	No studies were located which examined the impact of multivitamin supplementation on any outcomes in low birth weight (LBW) infants. 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.

	Many units provide a multivitamin preparation to all LBW infants until 6 to 12 months chronological age. 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. There are no clinical trial data on the effect of vitamin D on key clinical outcomes in infants with a birth weight > 1500 g.
Practice points	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). 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.
References	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
REVIEW	18/07/2027

Authors Contribution – Current version

Current author/s	Thao Tran, Srinivas Bolisetty
Evidence Review	
Expert review	
Nursing Review	Eszter Jozsa
Pharmacy Review	Thao Tran, Mohammad Irfan Azeem
ANMF Group contributors	Nilkant Phad, Srinivas Bolisetty, Bhavesh Mehta, John Sinn, Rebecca Barzegar, Kate Dehlsen, Mohammad Irfan Azeem, Helen Huynh, Michelle Jenkins, Kate Dehlsen, Stephanie Halena
Final editing	Thao Tran
Electronic version	Cindy Chen, Ian Callander
Facilitator	Srinivas Bolisetty