Pentavite
Newborn use only

2025

<table>
<tr><td>Alert</td><td>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.</td></tr>
<tr><td>Indication</td><td>Routine supplementation in preterm or low birthweight infants
Suggested age group: <37 weeks and/or birthweight <2.5 Kg.
Cholestasis</td></tr>
<tr><td>Action</td><td>Multivitamin supplement</td></tr>
<tr><td>Drug type</td><td>Multivitamin</td></tr>
<tr><td>Trade name</td><td>Pentavite Infant liquid 0-3 years</td></tr>
<tr><td>Presentation</td><td>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></td></tr>
<tr><td>Dose</td><td><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.</td></tr>
<tr><td>Dose adjustment</td><td></td></tr>
<tr><td>Maximum dose</td><td>0.45 mL DAILY for routine supplementation
0.45 mL BD for cholestasis</td></tr>
<tr><td>Route</td><td>Oral or intra-gastric tube</td></tr>
<tr><td>Preparation</td><td>No preparation required</td></tr>
<tr><td>Administration</td><td>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.</td></tr>
<tr><td>Monitoring</td><td></td></tr>
<tr><td>Contraindications</td><td>Not yet tolerating enteral feeds</td></tr>
<tr><td>Precautions</td><td>Direct administration into the mouth may cause choking and apnoea</td></tr>
<tr><td>Drug interactions</td><td></td></tr>
<tr><td>Adverse reactions</td><td></td></tr>
<tr><td>Overdose</td><td>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.</td></tr>
<tr><td>Compatibility</td><td>Not applicable.</td></tr>
<tr><td>Incompatibility</td><td>Not applicable.</td></tr>
<tr><td>Stability</td><td>Use within 9 weeks after opening.</td></tr>
<tr><td>Storage</td><td>Store below 25°C. Refrigerate after opening. Protect from light.</td></tr>
<tr><td>Excipients</td><td>Sodium saccharin, pineapple flavour</td></tr>
<tr><td>Special comments</td><td></td></tr>
</table>

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

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.

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Original 1.0 **Revised 2.0** **Revised 3.0**	08/08/2015 16/11/2020 18/07/2022
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