

MEDICATION SAFETY COMMUNICATION

Information for health professionals in NSW public health organisations

Multivitamin liquid for infants (Pentavite®) – 4 September 2023

Details of affected product(s)	Multivitamin liquid for infants (Pentavite) – ARTG 393911
Reason for communication	Disruption to supply
Date issue made apparent	22 August 2023
Supply impact dates	Late September 2023

Main indications and use

Multivitamin liquid for infants (Pentavite) is a multivitamin supplement used for the prevention of vitamin deficiency in infants born < 35 weeks gestation or < 2 kg birth weight.

Situation

There is a current disruption to the supply of multivitamin liquid for infants (Pentavite) until late September 2023. There are no like-for-like alternatives available on the Australian Register of Therapeutic Goods (ARTG).

Alternative agents

An alternative Australian registered multivitamin liquid that can be used is liquid multivitamin for infants (Brauer®). **Note – as per the Australasian Neonatal Medicines Formulary recommendations, this alternative should only be used as a substitute when Pentavite® is unavailable.**

Precautions, safety issues and other considerations associated with alternatives

While the alternative is a liquid multivitamin registered in Australia, there are differences in active ingredients, dose, frequency, and storage conditions (see **Table 1** on next page for a comparison). Important considerations:

- Note that the Brauer formula supplies betacarotene as the source of vitamin A. Betacarotene may be a suitable source of vitamin A in neonates.
- Additionally, the Brauer formula contains 200 IU/1 mL of vitamin D in comparison to the Pentavite formula which contains 400 IU/0.45 mL (Note: IU refers to international units). Therefore, a dose of 1 mL twice a day of the Brauer formula is required to provide a daily dose of 400 IU of vitamin D. Alternatively, 0.2 mL daily of vitamin D3 1000 IU/0.5 mL liquid (Ostelin®) can be given to provide a daily dose of 400 IU.

For further information, refer to the Australasian Neonatal Medicines Formulary (ANMF) consensus drug guidelines for the [Pentavite](#), [Brauer](#) and [vitamin D](#) formularies.

Liaison with local eMeds/eMR teams may be required to ensure the appropriate products and order sentences/sets are built and available in local electronic Medication Management systems.

Impacts of this communication on clinical practice

Actions to address the disruption to supply of multivitamin liquid for infants (Pentavite) should be coordinated and implemented by the local Drug and Therapeutics Committee in consultation with the relevant clinicians. A different Australian registered product, liquid multivitamin for infants (Brauer) is available and can be utilised by facilities after consideration of the above precautions and safety issues.

Associated regulatory or policy references

[PD2022_032 Medication Handling](#)

[PD2019_019 Coordination of responses to urgent system-level medicine or medical device issues](#)

Key contacts

Clinical Excellence Commission (Medication Safety) – CEC-MedicationSafety@health.nsw.gov.au
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Table 1. Comparison of multivitamin oral liquids (Pentavite and Brauer brands)*

	Multivitamin Liquid for Infants (Pentavite) – ARTG ID 393911	Liquid Multivitamin for Infants (Brauer) – ARTG ID 337233	
Presentation	Oral liquid – 30 mL bottle	Oral liquid – 45 mL bottle	
NSW Medicines Formulary	Listed – unrestricted ('vitamins')	Listed – unrestricted ('vitamins with minerals')	
Dose	0.45 mL daily (for preterm infants the dose may be halved (i.e. 0.23 mL) and given twice daily to improve tolerability) Note: dose not weight based.	1 mL once or twice daily. Note: dose not weight based.	
Maximum dose per day	0.45 mL	2 mL	
Route	Oral or intra-gastric tube	Oral or intra-gastric tube	
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.	Shake well before use. Administer undiluted or mixed with a small amount of milk into infant's mouth through a feeding teat or via intra-gastric tube.	
Storage	Store below 25°C. Protect from light. Refrigerate after opening. Use within 9 weeks after opening.	Store below 25°C. Protect from light. Product can be used until printed expiry date.	
Active ingredients	Amount per 0.45 mL dose	Amount per 1 mL dose	
	<i>Vitamin A</i>	390 micrograms	-
	<i>Betacarotene</i>	-	3 mg (equivalent to retinol/Vitamin A1 250 micrograms)
	<i>Vitamin D3</i>	10.1 micrograms (equivalent to 400 IU)	5 micrograms (equivalent to 200 IU)
	<i>Vitamin B1</i>	540 micrograms	112 micrograms
	<i>Vitamin B2</i>	810 micrograms	150 micrograms
	<i>Nicotinamide</i>	7.1 mg	1 mg
	<i>Vitamin B6</i>	111 micrograms	100 micrograms
	<i>Vitamin B12</i>	-	0.417 micrograms
	<i>Levomefolate glucosamine</i>	-	144.3 micrograms (equivalent to levomefolic acid 80 micrograms)
	<i>Vitamin C</i>	42.8 mg	7.5 mg
	<i>Calcium</i>	-	0.86 mg
	<i>Vitamin E</i>	-	4.04 mg
	<i>Choline</i>	-	37.5 mg
<i>Biotin</i>	-	1.5 micrograms	
Excipients	Sodium saccharin, pineapple flavour.	Ascorbyl palmitate, dl-alpha-tocopherol, gelatin, glycerol, maize oil, maize starch, potassium sorbate, purified water, sucrose, vegetable oil, xanthan gum.	

*Information obtained from the Australasian Neonatal Medicines Formulary (ANMF) consensus drug guidelines.