Brauer Infant Multivitamins

Newborn use only

infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose 2 mL/day Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee 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 No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.	r			
Indication Indication Vitamin supplementation Suggested age group: <37 weeks and/or birthweight <2.5 kg. Action Multivitamin supplement Trade name Presentation Trade name Brauer Liquid Multivitamin for Infants (0+) Oral liquid Each Imt liquid contains: Betacarotene (retinol equivalents 250 microgram) Vitamin B2 (citolandy) (riboflavin sodium phosphate 195 microgram) Nicotinamide Vitamin B2 (riboflavin) Vitamin B2 (riboflavin) Vitamin B1 (Maltivitamin) Itevomefolic acid (Quatrefolic*) (levomefolate glucosamine 144.3 microgram) Vitamin B (dascropilarin) Vitamin B (dascropilarin) Vitamin B (dascropilarin) Vitamin B1 (cynacobalamin) Vitamin B1 (cynacobalamin Vitamin B1 (cy	Alert	· ·		
Nitamin supplementation Suggested age group: <37 weeks and/or birthweight <2.5 Kg.				
Suggested age group: <37 weeks and/or birthweight <2.5 kg.			(or units) of vitamin D3.	
Multivitamin supplement	Indication		inthonograph 22 E Ma	
Drug type Multivitamin Trade name Brauer Liquid Multivitamin for Infants (0+) Presentation Graliquid Each 1mL liquid contains:	Action		irthweight <2.5 kg.	
Trade name Brauer Liquid Multivitamin for Infants (0+) Presentation Oral liquid Each Arm Liquid contains:				
Presentation Cral liquid Each 1mL liquid contains:				
Each 1mL liquid contains: Betacarotene (retinol equivalents 250 3 mg microgram) Vitamin D3 (colecalciferol) 200 units (5 microgram) Vitamin D3 (colecalciferol) 112 microgram Vitamin B2 (riboflavin) (riboflavin sodium 150 microgram Nicotinamide 1 mg Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate 100 microgram Nicotinamide 1 mg Vitamin B12 (riboflavin) (pyridoxal 5-phosphate 100 microgram Nitamin B12 (riboflavin) (pyridoxal 5-phosphate 100 microgram Vitamin B12 (ropacobalamin) 417 nanogram Levomefolic acid (Quatrefolic*) (levomefolate 80 microgram glucosamine 144.3 microgram) Vitamin C (ascorbic acid) and calcium (calcium 7.5 mg and 860 microgram ascorbate dihydrate 9.12 mg Vitamin E (a-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg 37.5 mg Biotin 1.5 microgram Use only when Pentavite is not available (see table in special comments) 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid -400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D3 liquid -400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered.				
Betacarotene (retinol equivalents 250 3 mg microgram) Vitamin D3 (colecalciferol) 200 units (5 microgram) Vitamin D3 (colecalciferol) 112 microgram Vitamin B1 (thiamine hydrochloride) 112 microgram Vitamin B2 (riboflavin) (riboflavin sodium 150 microgram hosphate 195 microgram) Nicotinamide 1 mg Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate 100 microgram 100 microgram vitamin B12 (cyanocobalamin) 417 nanogram 1417 nanogram 142 (cyanocobalamin) 417 nanogram 143 microgram) Vitamin E (dalpha tocopheryl ecetate) 40.0 microgram 27.5 mg and 860 microgram 37.5 mg 37.5	Presentation	·		
microgram) Vitamin D3 (colecalciferol) 200 units (5 microgram) Vitamin B2 (riboflavin) (riboflavin sodium phosphate 195 microgram) Nicotinamide 1 mg Vitamin B4 (riboflavin) (riboflavin sodium phosphate 195 microgram) Nicotinamide 1 mg Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate monohydrate 177 microgram) Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate monohydrate 177 microgram) Vitamin B12 (cyanocobalamin) 417 nanogram Levomefolic acid (Quatrefolic**) (levomefolate glucosamine 144.3 microgram) Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram Dose Use only when Pentavite is not available (see table in special comments for comparison). 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered.			3 mg	
Vitamin D3 (colecalciferol) 200 units (5 microgram)		1 1	3 1118	
Vitamin B1 (thiamine hydrochloride)			200 units (5 microgram)	
Vitamin B2 (riboflavin) (riboflavin sodium phosphate 195 microgram) 150 microgram 150 mi				
Nicotinamide				
Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate monohydrate 177 microgram) Vitamin B12 (cyanocobalamin) 417 nanogram Evomefolic acid (Quatrefolic®) (levomefolate glucosamine 144.3 microgram) Vitamin B12 (cyanocobalamin) 7.5 mg and 860 microgram Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram 1.5 microgram Dose		phosphate 195 microgram)	-	
monohydrate 177 microgram) Vitamin B12 (cyanocobalamin) 417 nanogram Vitamin B12 (cyanocobalamin) 417 nanogram 80 microgram glucosamine 144.3 microgram) Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram 1.5 micr		Nicotinamide	1 mg	
Vitamin B12 (cyanocobalamin)		Vitamin B6 (pyridoxine) (pyridoxal 5-phosphate	100 microgram	
Levomefolic acid (Quatrefolic®) (levomefolate glucosamine 144.3 microgram) Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram Dose Use only when Pentavite is not available (see table in special comments for comparison). 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administration or via intra-gastric tube. Administration 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 Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.				
glucosamine 144.3 microgram) Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram Dose Use only when Pentavite is not available (see table in special comments for comparison). 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose 2 mL/day		· ·		
Vitamin C (ascorbic acid) and calcium (calcium ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg 37.5 mg Biotin 1.5 microgram 37.5 mg Biotin 1.5 microgram 1.			80 microgram	
ascorbate dihydrate 9.12 mg) Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram Dose Use only when Pentavite is not available (see table in special comments for comparison). 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose 2 mL/day Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee or via intra-gastric tube. Monitoring Contraindications Not yet tolerating full feeds. Precautions Direct administration into the mouth may cause choking and apnoea. Oral or further information, contact the Poisons Information Centre on 131 126 (Australia). Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia).			7.5 4.000	
Vitamin E (d-alpha tocopheryl acetate) 4.04 mg Choline (choline bitartrate 91.91 mg) 37.5 mg Biotin 1.5 microgram			7.5 mg and 860 microgram	
Choline (choline bitartrate 91.91 mg) Biotin 1.5 microgram			4.04 mg	
Biotin 1.5 microgram				
Use only when Pentavite is not available (see table in special comments for comparison). 1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral in (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administration uniquituded or mixed with a small amount of milk into infant's mouth through a fee 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 No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.				
1 mL once or twice daily. Dose is not based on weight. (Refer to special comments) NOTE: To optimise vitamin D intake, a combination of vitamin D3 liquid - 400 units/day PLUS infant vitamins 1 mL DAILY (200 units of vitamin D) may be considered. Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral to (2) Continue up to 6-12 months corrected age. Dose adjustment Maximum dose Z mL/day Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administration Administration Contraindications Not yet tolerating full feeds. Precautions Direct administration into the mouth may cause choking and apnoea. Drug interactions Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.	Dose			
Dose adjustment Adximum dose 2 mL/day Total cumulative dose 0 Coral 0 Coral Preparation Oral or intra-gastric tube. Administration and intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee 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 No information. Adverse reactions For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.		Suggested regimen: (1) To be given when the infant is tolerating ≥ 120 mL/kg/day of enteral feeds.		
Maximum dose 2 mL/day Total cumulative dose 0 Route Oral Preparation Oral or intra-gastric tube. Administration Oral or intra-gastric tube. Monitoring One or via intra-gastric tube. Monitoring One or via intra-gastric tube. Precautions Not yet tolerating full feeds. Precautions Direct administration into the mouth may cause choking and apnoea. Drug interactions No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.		(2) Continue up to 6-12 months corrected age.		
Total cumulative dose Route Oral Preparation Administration Oral or intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee 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 No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.				
dose Route Oral Preparation Oral or intra-gastric tube.		2 mL/day		
PreparationOral or intra-gastric tube. AdministrationOral or intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee or via intra-gastric tube.MonitoringMonitoringContraindicationsNot yet tolerating full feeds.PrecautionsDirect administration into the mouth may cause choking and apnoea.Drug interactionsNo information.Adverse reactionsFor further information, contact the Poisons Information Centre on 131 126 (Australia).CompatibilityNot applicable.				
Administration Oral or intra-gastric tube. Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee or via intra-gastric tube. Monitoring Contraindications Not yet tolerating full feeds. Precautions Direct administration into the mouth may cause choking and apnoea. No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.	Route	Oral		
Administer undiluted or mixed with a small amount of milk into infant's mouth through a fee or via intra-gastric tube. Monitoring Contraindications Not yet tolerating full feeds. Precautions Direct administration into the mouth may cause choking and apnoea. No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.	Preparation			
ContraindicationsNot yet tolerating full feeds.PrecautionsDirect administration into the mouth may cause choking and apnoea.Drug interactionsNo information.Adverse reactionsFor further information, contact the Poisons Information Centre on 131 126 (Australia).CompatibilityNot applicable.	Administration	Administer undiluted or mixed with a small amount of milk into infant's mouth through a feeding teat		
Precautions Direct administration into the mouth may cause choking and apnoea. Drug interactions No information. Adverse reactions For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.				
Drug interactions No information. Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.	Contraindications	Not yet tolerating full feeds.		
Adverse reactions Overdose For further information, contact the Poisons Information Centre on 131 126 (Australia). Compatibility Not applicable.		<u>-</u>	oking and apnoea.	
OverdoseFor further information, contact the Poisons Information Centre on 131 126 (Australia).CompatibilityNot applicable.		No information.		
Compatibility Not applicable.	Adverse reactions			
	Overdose	For further information, contact the Poisons Inform	nation Centre on 131 126 (Australia).	
	Compatibility	Not applicable.		
· · · · · · · · · · · · · · · · · · ·	Incompatibility	Not applicable.		
Stability Shake well before use.	Stability			
Storage Store below 25°C. Protect from light.	Storage	Store below 25°C. Protect from light.		

Brauer Infant Multivitamins

Newborn use only

Excipients	Ascorbyl palmitate, dl-alpha-tocopherol, gelatin, glycerol, maize oil, maize starch, potassium sorbate,	
	purified water, sucrose, vegetable oil, xanthan gum.	

Special comments

Brauer formula supplies betacarotene as the source of vitamin A. Betacarotene may be a suitable source of vitamin A in neonates.

Vitamin D content is 200 units/mL. A dose of 1 mL BD provides a dose of 400 units daily.

	Pentavite 0.45 mL	Brauer 1 mL
Vitamin A	390 microgram	
Betacarotene		3 mg (equiv. to Retinol equivalent 250 microgram)
Vitamin D3	10.1 microgram	200 units (equiv. to 5 microgram colecalciferol)
Vit. B1	540 microgram	112 microgram
Vit. B2	810 microgram	150 microgram
Nicotinamide	7.1 mg	1 mg
Vit. B6	111 microgram	100 microgram
Vit. B12		0.417 microgram
Levomefolate glucosamine		144.3 microgram (equiv. to Levomefolic acid 80 microgram)
Vitamin C	42.8 mg	Calcium ascorbate dihydrate 9.12 mg (equiv. to Vitamin C 7.5 mg and Calcium 0.86 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

References

- 1. Product Information: Brauer Infant Multivitamins Oral Liquid. <u>Liquid Multivitamin for Infants Our Range Brauer Website</u> Accessed 25/8/23
- 2. Edmond K. Optimal feeding of low-birth-weight infants, technical review. 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.

VERSION/NUMBER	DATE
Original 1.0	25/08/2023
Version 1.0 (Minor errata)	14/09/2023
Version 1.0 (minor errata)	18/07/2024

Brauer Infant Multivitamins

Newborn use only

Version 2.0	15/08/2024
Current 2.0 (minor errata)	22/08/2024
REVIEW	15/08/2029

Authors Contribution

Author/s	Michelle Jenkins, Srinivas Bolisetty	
Evidence Review		
Expert review		
Nursing Review	Benjamin Emerson-Parker	
Pharmacy Review	Michelle Jenkins, Cindy Chen	
ANMF Group contributors	Nilkant Phad, Bhavesh Mehta, Rebecca Barzegar, Kerryn Houghton, Martin Kluckow,	
	Mohammad Irfan Azeem, Rebecca O-Grady, Cindy Chen, Thao Tran, Susannah Brew,	
	Michelle Jenkins, Natalia Srnic, Stephanie Halena, Renae Gengaroli, Samantha Hassall	
Final editing	Michelle Jenkins, Benjamin Emerson-Parker, Srinivas Bolisetty	
Electronic version	Thao Tran, Natalia Srnic, Cindy Chen, Ian Callander	
Facilitator	Srinivas Bolisetty	