GUIDELINE

Vitamin and Mineral Supplementation

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

Quick Reference Table

	In Hospital	At Discharge
Cholecalciferol (Vitamin D)		
• Preterm infants born < 35 weeks gestation weighing <1.8 kg	Once full enteral feeds are achieved	ONLY if infant is vitamin D deficient 25(OH)D <50 nmol/L 6 week GP Follow up letter
• Breastmilk fed infants born ≥ 35 weeks gestation of mothers with vitamin D deficiency	ONLY if infant has one or more Vitamin D risk factors	6 week GP follow up letter
Ferrous Sulphate		
• All preterm infants born < 35 weeks gestation fed unfortified breast milk	Not before 4 weeks of age	Continue to at least 4 months corrected age - encourage iron-rich foods when introducing solids.
Penta-Vite (Infants 0-3 y) **Calcium** **Phosphate**	ONLY consider if preterm infant born < 35 weeks gestation is fed full feeds of unfortified breast milk	×

Vitamin D Supplement

ALL infants with one or more risk factors listed below should be considered for vitamin D prophylaxis:

- Infants with rickets.
- Infants with vitamin D deficiency 25(OH)D level.

- Prophylaxis for all preterm infants born < 35 weeks gestation with weights below 1.8 kg.
- Prophylaxis for infants with one or more risk factors for Vitamin D deficiency.
    - Infants born to a mother with low Vitamin D and receiving breast milk.
    - Lack of skin exposure to sunlight.
    - Dark skin.
    - Conditions affecting vitamin D metabolism and storage (hypoparathyroidism, renal osteodystrophy, cholestatic liver disease).

Vitamin D treatment dose **FOR SEVERE VITAMIN D DEFICIENCY** 25(OH) D <30nmol/L is higher than the prophylaxis dose.

The vitamin D status of all preterm infants born < 35 weeks gestation is monitored monthly in hospital at 4, 8 and 12 weeks and/or at discharge and supplemented as indicated.

At discharge, only infants being treated for vitamin D deficiency and breast milk-fed infants of Vitamin D deficient mothers need Vitamin D supplementation with GP follow-up at 6 weeks post term, as per hospital guidelines.

Note: Different fortifiers and formula may contain different amounts of vitamin D. **At KEMH and PCH**, PreNAN Human Milk Fortifier, Allula S26 LBW RTF Preterm formula and Nan Optipro 1 RTF Term Formula are used.

Also refer to Neonatal Medication Protocol: Cholecalciferol (Vitamin D)

Multivitamin Supplement (Pentavite 0-3 y)

Preterm infants born < 35weeks gestation who are tolerating full, unfortified breast milk feeds may require a multivitamin supplementation. The multivitamin supplement should be ceased at discharge.

Note: Multivitamin supplements are not required routinely for infants receiving fortified breast milk or infant formula. Pentavite (Infants 0-3 years) multivitamin oral liquid contains water soluble vitamins and the fat soluble vitamins, A and D.

Also refer to Neonatal Medication Protocol: Vitamins, Infants.

Iron Supplement

At KEMH, PreNAN HMF* is used to fortify breast milk. PreNAN Human Milk Fortifier contains iron. Therefore, starting not before 4 weeks of age, only infants born <35 weeks gestation who are fed unfortified breast milk should receive iron supplements until at least 4 months corrected age. Infants should be consuming iron-containing foods before iron supplementation is ceased.

Formula-fed infants and infants receiving breast milk fortified with PreNAN Human Milk Fortifier **do not** require an iron supplement.

*Note: Different fortifiers contain different amounts of iron.

Also refer to Neonatal Medication Protocol: Ferrous Sulphate.

Calcium / Phosphate Supplement

Preterm infants born < 35 weeks gestation who are fed full feeds of unfortified breast milk may require calcium and phosphate supplementation. Routine bone blood monitoring will highlight if levels are low and supplementation required.

Also refer to Neonatal Medication Protocol: Calcium Carbonate; Phosphate (Buffered).

Related CAHS internal policies, procedures and guidelines
Neonatal Medication Protocols • Cholecalciferol (Vitamin D) • Vitamins, Infants. • Ferrous Sulphate. • Phosphate (Buffered) • Calcium Carbonate

Useful resources (including related forms)
Maternal Vitamin D Deficiency and Family Monitoring GP Follow up Letter

This document can be made available in alternative formats on request.

Document Owner:	Neonatology		
Reviewer / Team:	Neonatology		
Date First Issued:	June 2006	Last Reviewed:	October 2021
Amendment Dates:	22/12/21 - hyperlinks	Next Review Date:	October 2024
Approved by:	Neonatology Coordinating Group	Date:	21st October 2021
Endorsed by:	Neonatology Coordinating Group	Date:	
Standards Applicable:	NSQHS Standards: Child Safe Standards: 1,10		

Printed or personally saved electronic copies of this document are considered uncontrolled

Healthy kids, healthy communities

Compassion | Excellence | Collaboration | Accountability | Equity | Respect

Neonatology | Community Health | Mental Health | Perth Children's Hospital