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 PMH, PreNAN Human Milk Fortifier, PreNAN RTF Preterm formula and Aptamil RTF Term Formula are used.

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

Multivitamin Supplement (Pentavite 0-3 y)

Preterm infants born < 35 weeks 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 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.

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

<table>
<thead>
<tr>
<th>Cholecalciferol (Vitamin D)</th>
<th>In Hospital</th>
<th>At Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Preterm infants born &lt; 35 weeks gestation weighing &lt;1.8 kg</td>
<td>✓</td>
<td>ONLY if infant is vitamin D deficient 25(OH)D &lt;50 nmol/L 6 week GP Follow up letter</td>
</tr>
<tr>
<td>• Breastmilk fed infants born ≥ 35 weeks gestation of mothers with vitamin D deficiency</td>
<td>ONLY if infant has one or more Vitamin D risk factors</td>
<td>✓ 6 week GP follow up letter</td>
</tr>
</tbody>
</table>

Ferrous Sulphate

• All preterm infants born < 35 weeks gestation fed unfortified breast milk

<table>
<thead>
<tr>
<th>Penta-vite (Infants 0-3 y)</th>
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<th>At Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONLY consider if preterm infant born &lt; 35 weeks gestation is fed full feeds of unfortified breast milk</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calcium</th>
<th>In Hospital</th>
<th>At Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONLY consider if preterm infant born &lt; 35 weeks gestation is fed full feeds of unfortified breast milk</td>
<td>✓</td>
<td></td>
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<table>
<thead>
<tr>
<th>Phosphate</th>
<th>In Hospital</th>
<th>At Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONLY consider if preterm infant born &lt; 35 weeks gestation is fed full feeds of unfortified breast milk</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

In Hospital At Discharge

Cholecalciferol (Vitamin D)

- Preterm infants born < 35 weeks gestation weighing <1.8 kg
- Breastmilk fed infants born ≥ 35 weeks gestation of mothers with vitamin D deficiency

Ferrous Sulphate

- All preterm infants born < 35 weeks gestation fed unfortified breast milk

Calcium

- ONLY consider if preterm infant born < 35 weeks gestation is fed full feeds of unfortified breast milk

Phosphate

- ONLY consider if preterm infant born < 35 weeks gestation is fed full feeds of unfortified breast milk
# Related WNHS policies, procedures and guidelines

| Neonatal Medication Protocols | - Vitamin and Mineral Supplements  
|                             | - Cholecalciferol (Vitamin D)  
|                             | - Vitamins, Infants  
|                             | - Ferrous Sulphate  
|                             | - Phosphate (buffered)  
|                             | - Calcium Carbonate  

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| Date endorsed: | 27\textsuperscript{th} June 2017  

Standards Applicable: NSQHS Standards: 1\textsuperscript{ Governance, 4\textsuperscript{ Medication Safety

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