



WEBINAR: NATIONAL DEPARTMENT OF HEALTH NEWBORN GUIDELINES

FEEDS AND FLUIDS & NUTRITIONAL SUPPLEMENTATION

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FEEDS AND FLUIDS: Chapter Structure

Feeding Choice

Feeding Route and Feeding Frequency

Maximum Feed Volumes

Indications to Stop Feeds

Breastmilk Fortification

Acceptable Growth Rates



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Feeding Choice



- **Mothers Own Milk (MOM)**
- Donor Expressed Breast Milk (DEBM)
- Replacement Feeding



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Feeding Route

**< 34 Weeks
Gestational Age**

- Nasogastric or orogastric tube feeds

**≥ 34 Weeks
Gestational Age**

- Breastfeeding or cup feeding

All babies

- Encourage sucking from the breast



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Feeding Frequency and Maximum Feed Volume

Well Babies \geq 34 Weeks Gestational Age and \geq 1800 Grams can usually breastfeed

Babies \geq 1500 Grams at Birth and \geq 32 Weeks Gestational Age

- Full bolus feeds at 60 ml/kg/day on day 1
- Increase daily to 90, 120, 150 ml/kg/day
- No intravenous fluids needed

Babies $<$ 1500 Grams at Birth or $<$ 32 Weeks Gestational Age

- Day 1: 2 hourly bolus feeds with intravenous fluids
- Calculate total daily intake, based on birth weight (refer to table)
- Start enteral feeds at 24 ml/kg/day on day 1 - remaining volume intravenous fluids
- Increase feed volume by 36 ml/kg/day until reaching final feed volume of 160 ml/kg/day
- Gradually reduce intravenous fluid component

Total Fluid and Feed Volume on Day 0 of Life

Birth Weight	Fluids	Day 1 Total Intake
$<$ 1000 grams	5% Dextrose Water (DW)	90 ml/kg/day
1000-1199 grams	10% Neonatalyte (NNL)	80 ml/kg/day
1200-1499 grams	10% NNL	70 ml/kg/day



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When Should Milk Feeds Be Stopped?

- Tense abdominal distention
- Abdominal wall discolouration
- Gross or occult blood in stool
- Bile-stained vomits
- Necrotising enterocolitis (NEC)



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Breastmilk Fortification



Indication for Human Milk Fortifiers

Babies < 1500 grams, 24 hours after full enteral feeds at 160 ml/kg/day, even if gaining weight

Poor weight gain despite adequate breast milk

Acceptable Weight Loss and Gain

- **Term Babies**
 - May lose up to 10% of birth weight in first few days
- **Preterm Babies**
 - Use appropriate growth charts
 - May lose up to 15% of birth weight in first few days



Nutritional Supplementation Structure

Vitamin K
Vitamin D
Vitamin A
Multivitamins
Iron
Sodium



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Vitamin K

Indication:
All babies at birth

Dose at birth:
 ≤ 1500 grams:
0.5 mg intramuscularly
 > 1500 grams:
1 mg intramuscularly

Vitamin K

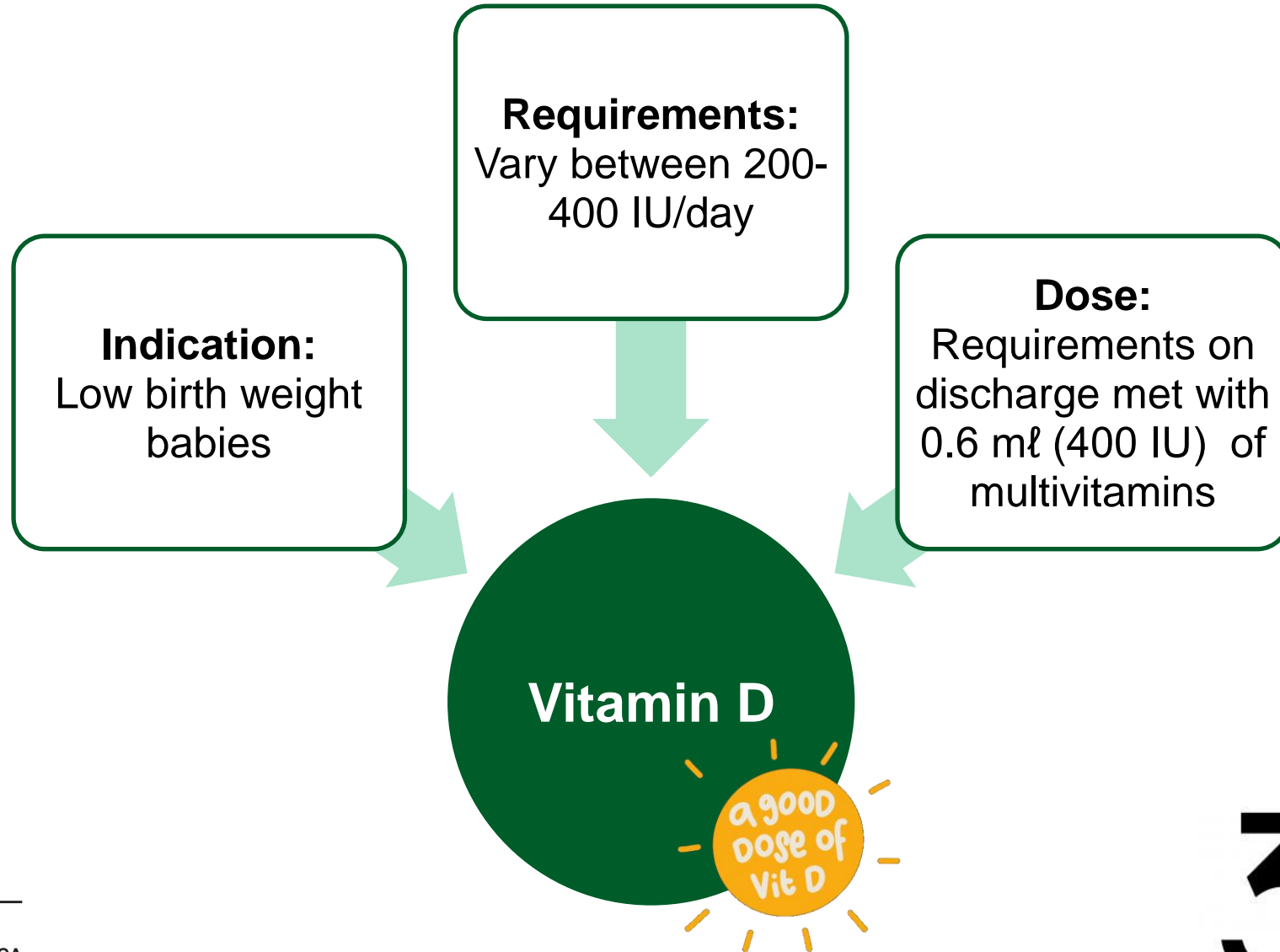


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Vitamin D



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MULTIVITAMINS AND VITAMIN A



MULTIVITAMINS

- **Indication:**
- Low birth weight babies
- Start 24 hours after human milk fortifier if indicated or 24 hours after full feeds if not
- **Dose:** 0.6 ml of multivitamins

VITAMIN A

- Included in routine multivitamin supplementation



IRON AND SODIUM

IRON



- **Indication:**
- Breastfed low birth weight babies from day 28 of life or discharge
- **Dose:** 2-4 mg/kg/day of elemental iron

SODIUM

- **Indication:**
Low birth weight babies with serum sodium < 135 mmol/l and poor growth
- **Dose:** 0.5 mls 5% sodium chloride orally 8 hourly



THANK YOU AND QUESTIONS?



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