HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Neonatal Intensive Care Unit (NICU)		
Document:	Departmental Policy and Procedure		
Title:	Guidelines for Enteral Feeding for Infants		
Applies To:	All NICU Staff		
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1. PURPOSE:

1.1 To provide safe and effective management of enteral feedings for infants in the Neonatal Intensive Care Unit (NICU).
1.2 To achieve growth rate similar to that of the intrauterine fetus of the same gestational age.
1.3 Just Culture Principle: MCH-Hafar Al Batin staff will not be accountable for organizational or systematic issues or for human error that is not caused by deliberate reckless or risky behaviours. Just culture principle balances organizational accountability, system flaws and professional accountability and promotes leadership from adverse events and near misses.

2. DEFINITIONS:

2.1 Minimal Enteral Feeds (MEF): Very small volumes of breast milk or formula fed to very low birth weight (VLBW) infants during the early days of life to stimulate gut maturation, hormone release, and motility, known as trophic feeds or minimal enteral nutrition.
2.2 Adlib Feeds: The baby is allowed to take as much volume as they wish with scheduled feeding times.
2.3 Demand Feeds: The baby is allowed to feed as often as they wish with no volume limit.

3. POLICY:

3.1 Enteral feeds should be initiated as early as possible and parents' feeding plan should be considered and documented prior to commencing feeding.
3.2 Breastfeeding is encouraged and every mother must be offered information and support for breastfeeding and expressing breast milk.
3.3 Infants with the umbilical arterial catheter may be fed enterally, irrespective of where the line is placed (high or low).
3.4 Infants with the umbilical venous catheter may be fed enterally if the tip of the catheter is located above the diaphragm and it has not been used for any type of exchange transfusion.
3.5 During feeding, the infant must be continuously observed for any signs of respiratory distress or vomiting. If these signs are observed, feeding must be reviewed by a physician.
3.6 Abdominal girth will be measured and escalated as per 7.4 Appendix D.

4. PROCEDURE:

4.1 Feeding started by breast milk or regular formula for all babies >32 weeks gestation and birth weight >1800g.
4.2 Formula and breast milk must not be diluted.
4.3 Feeding additives, volumes and frequencies are administered according to the protocols in Appendix A (the choice of which guideline to follow is dependent on the consultant). Vitamin and mineral supplements are administered according to the guideline in Appendix B. Discharge feeding and supplementation is determined by the guideline in Appendix C. less than 1500g birth weight:

4.4 **Commence minimal enteral feeding (MEF) as soon as possible after birth:**

4.4.1 Use breast milk exclusively for the first 48 hours of life except if contraindicated or if the mother's feeding plan is for artificial feeding.

4.4.2 Regular or premature formula may be used according to the consultant's preference.

4.4.3 Feeding volume and frequency (follow Appendix A).

4.4.4 Do not check for pre-feed gastric residuals.

4.4.5 MEF volumes are not calculated into the infants daily fluid intake but are included in the "24 hour actual intake".

4.5 **Consider discontinuing MEF if one of the following are observed:**

4.5.1 Abdominal distension

4.5.2 Bloody stools

4.5.3 Bilious aspirates (assessed from aspirates obtained when tube placement confirmation done) or emesis.

4.5.4 Abnormal abdominal x-ray.

4.6 When reinstituting MEF after an interruption, infants should receive the remainder of their MEF protocol.

4.7 **1500-2000g birth weight:**

4.7.1 Make transition from gavage to oral feeding gradually and increase as tolerated by the infant when there are physiological signs of readiness to orally feed and they are physiologically stable and in no distress when feeding.

4.7.2 When the infant's history or condition places them at the higher risk for developing necrotizing enterocolitis, the feeding protocol can be altered to allow for slower advancement of feeds.

4.7.3 Feeding frequency may be changed to q3h when baby has demonstrated tolerance of full feedings.

4.8 **Greater than 2000g birth weight:**

4.8.1 Infants with more than 2000g birth weight and 35 weeks or greater gestation at birth are at a low risk for necrotizing enterocolitis may have feeding advanced at a faster rate the protocol. Feeds should not generally be increased faster than 30ml/kg/day.

4.8.2 Feeding may be started at a higher volume and increased faster based on assessment of infant's history, condition and tolerance of feeds. Feeds should not generally be increased faster than 30ml/kg/day.

4.8.3 Frequency of feedings may be q3 or 4h.

4.9 **Gavage feeding guidelines:**

4.9.1 Options for feeding tube placement include nasal or oral placement. The appropriate combination should be determined individually for each infant using the advantages and limitations outlined in Appendix A.

4.9.2 Milk in syringe must be placed in a plastic bag or other leak proof cover before immersing in warm tap water.

4.9.3 Bolus feeding can be done either by gravity or infusion pump.

4.9.4 Hold the syringe just above the infant's head so the feed infuses slowly.

4.9.5 Bolus feeds should take approximately 15 minutes to complete.

4.9.6 Allow the infant to suck on a soother during the feeding.

4.9.7 Nasogastric (NG) or Orogastric (OG) tubes are changed every 7 days at pm. Silastic feeding tubes are changed every 30days. Transpyloric tubes are changed by physicians or nurses privileged in their insertion.

4.10 **Continuous gavage feeding:**

4.10.1 Visually assess feeding tube position every hour.

4.10.2 Check tube position and gastric residuals prior to each feed.

4.10.3 Milk and administration sets should be routinely changed every 4 hours (excluding OGT/NGT).

4.10.4 Weaning from continuous to bolus feed is reviewed during the daily rounds.

4.10.5 If gastric residuals are greater than twice the hourly rate, refer to the physician.

4.11 **Management of pre-feed gastric residuals:**

4.11.1 Aspirates which determine whether a baby is tolerating feeds, should be done Q3H for baby's being fed every 3 hours or Q4H for babies being fed every 2 and 4 hours.

4.11.2 Aspirate less than 30% of previous feed:
4.11.2.1 Re-feed the aspirate and give full amount of due feeding.
4.11.2.2 Continue to advance if on feeding protocol.
4.11.3 If aspirate is stained with dark green bile, fresh blood, or volume is greater than 30% of previous feed, notify the physician and review the feeding plan.

4.12 **Adlib/demand feeding guidelines:**
4.12.1 Infants who are transitioning from gavage feeds may be considered for demand or adlib feedings:
4.12.1.1 Gaining weight at a minimum of 10g/kg/day.
4.12.1.2 Orally feeding full requirements without difficulty for 48 hours at either Q3H or Q4H frequency.
4.12.2 Infants who are late preterm or who do not wake on their own to demand their feed are fed adlib on a q3h schedule. They may be discharged on this feeding regime if they have met all other discharge criteria. Parents should be provided with education.
4.12.3 Consult a Lactation Consultant (if available) for all infants who are breastfeeding and are being discharged before 37 weeks correct age.
4.12.4 Adlib feedings:
4.12.4.1 Feeding volume may be increased liberally only for infants who do not have fluid restrictions.
4.12.4.2 Volume consumed must be assessed every 8 hours.
4.12.4.3 Minimum acceptable fluid volume for feeding is based on physician's fluid order.
4.12.4.4 Infant should be changed to another feeding routine if volumes are inadequate after 24 hours.

4.13 **Demand feedings:**
4.13.1 Infants may be switched to demand feeding after 24 hours of successful adlib feedings.
4.13.2 A maximum time of 5 hours between feeding is allowed once per 24 hours. This may be extended in the older long term patient as per physician's order.
4.13.3 If the infant does not demonstrate an increase in weight in 48 hours, the healthcare team should reassess appropriateness of feeding regime.
4.13.4 Weight infant daily until a weight gain of 10g/kg/day is demonstrated for 3 consecutive days.
4.13.5 Physician or dietician will calculate the caloric intake (kcal/kg/day) daily until a weight gain of 10g/kg/day is demonstrated for 3 consecutive days.
4.13.6 Some infants who are on demand feeding will take volumes in excess of 200ml/kg/day of expressed breast milk or term formula.

5. MATERIAL AND EQUIPMENT:

5.1 Infusion Pumps

6. RESPONSIBILITIES:

6.1 Physician
6.2 Nurse

7. APPENDICES

7.1 Minimal Enteral Feeding Protocol
7.2 Feeding Protocols for Different Birth Weights
7.3 Feeding Protocols for Preterm Infants
7.4 Preterm Infants Vitamin and Mineral Supplementation Guidelines
7.5 Discharge Feeding and Supplementation Guidelines
7.6 Abdominal Girth Guidelines
7.7 American Academy of Pediatrics Clinical Reports 2008

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9. APPROVALS:

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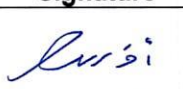
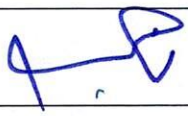
Prepared by:	Ms. Afrah Saud Al Shammari	NICU Head Nurse		January 05, 2025
Prepared by:	Dr. Falah Nabhan Al Shammari	NICU Quality Coordinator		January 05, 2025
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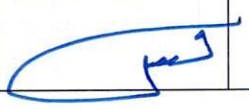
Approved by:	Mr. Fahad Hazam Al -Shammari	Hospital Director		January 19, 2025

7.1 APPENDIX

Minimal Enteral Feeding Protocol

8-12 ml/kg/day divided into 4-8 feeds given by gavage feeding

1000-1499g minimal enteral feeding for 2 to 4 days.

Volume: 2ml q4h for 2 days and then increase to 2ml q2hs for 1-2 days.

801-999g minimal enteral feeding for 3 to 5 days.

Volume: 1ml q4h for 2 days, increasing to 1.0ml q2h for 1 to 3 days

≤ 800g minimal entetral feeding for 5 to 7 days.

Volume: 0.5ml q2h

7.2 APPENDIX

FEEDING PROTOCOLS FOR DIFFERENT BIRTH WEIGHTS

Feeding Guidelines for Infants: 500-599

Feed #	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	7	7	7	7	7	7

Feeding Guidelines for Infants: 600-699

Feed #	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	2	2	2	2	2	2
2	3	3	3	3	3	3	3	3	3	3	3	3
3	4	4	4	4	4	4	5	5	5	5	5	5
4	6	6	6	6	6	6	6	6	6	6	6	6
5	7	7	7	7	7	7	8	8	8	8	8	8
6	9	9	9	9	9	9	9	9	9	9	9	9

Feeding Guidelines for Infants: 700-799

Feed #	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	2	2	2	2	2	2
2	3	3	3	3	3	3	4	4	4	4	4	4
3	4	4	4	4	5	5	5	5	5	5	5	5
4	6	6	6	6	6	6	7	7	7	7	7	7
5	8	8	8	8	8	8	9	9	9	9	9	9
6	10	10	10	10	10	10	10					

Feeding Guidelines for Infants: 800-999

Feed #	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	2	2	2	2	2	2
2	3	3	3	3	3	3	4	4	4	4	4	4
3	5	5	5	5	5	5	6	6	6	6	6	6
4	7	7	7	7	7	7	8	8	8	8	8	8
5	9	9	9	9	9	9	10	10	10	10	10	10
6	11	11	11	11	11	11	12	12	12	12	12	12

Feeding Guidelines for Infants: 1000-1249

Feed #	1	2	3	4	5	6	7	8	9	10	11	12
1	2	2	2	2	2	2	3	3	3	3	3	3
2	4	4	4	4	4	4	5	5	5	5	5	5
3	6	6	6	6	6	6	7	7	7	7	7	7
4	8	8	8	8	8	8	9	9	9	9	9	9
5	10	10	10	10	10	10	11	11	11	11	11	11
6	12	12	13	13	14	14	15	15	16	16	16	16

Feeding Guidelines for Infants: 1250-1499

Feed #	1	2	3	4	5	6	7	8
1	4	4	5	5	6	6	7	7
2	8	8	9	9	10	10	11	11
3	12	12	13	13	14	14	15	15
4	16	16	17	17	18	18	19	19
5	20	21	22	22	23	23	24	24
6	25	26	27	28	28			

Feeding Guidelines for Infants: 1500-1749

Feed #	1	2	3	4	5	6	7	8
1	4	5	6	6	7	7	8	9
2	10	11	12	12	13	13	14	15
3	16	17	18	18	19	19	20	21
4	22	23	24	24	25	25	26	27
5	28	29	30	30	31	31	32	33
6								

Feeding Guidelines for Infants: 1750-2000

Feed #	1	2	3	4	5	6	7	8
1	4	5	6	6	7	7	8	9
2	10	11	12	12	13	13	14	15
3	16	17	18	18	19	19	20	21
4	22	23	24	24	25	25	26	27
5	28	29	30	30	31	31	32	33
6								

FEEDING PROTOCOLS FOR DIFFERENT BIRTH WEIGHTS ACCORDING TO SAUDI NEONATAL SOCIETY

Feeding Protocol for Preterm Infants
Revision 1

	<750g	750-999g	1000-1249g	1250-1499g	1500-1749g	1750-2000g
Trophic Feeding Initiation	As per protocol	As per protocol	---	---	---	---
Trophic Feeding Amount	1cc q 4hr x 3d	1cc q 4hr x 3d	---	---	---	---
Feeding Amount/ Frequency	1cc q 2hr	1cc q 2hr	1cc q 2hr	1cc q 3hr	1cc q 3hr	1cc q 3hr
Increment	0.5cc q 12hr	1cc q 24hr x 2d then 1cc q 12hr	1cc q 24hr x 1d then 1cc q 12h	1cc q 6hr	1cc q 6hr	2cc q 6hr

Feeding Protocol for Infant <750 gram

Type of Formula	Day of Feeding	Feeding Volume (Q4 hours)					
EBM/Preterm Milk Formula	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	2	1	1	1	1	1	1
EBM/Preterm Milk Formula	3	1	1	1	1	1	1

Type of Formula	Day of Feeding	Feeding Volume (Q2 hours)											
EBM/Preterm Milk Formula	4	1	1	1	1	1	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	5	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2	2	2	2
EBM/Preterm Milk Formula	6	2.5	2.5	2.5	2.5	2.5	2.5	3	3	3	3	3	3
EBM/Preterm Milk Formula	7	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4
EBM/Preterm Milk Formula	8	4.5	4.5	4.5	4.5	4.5	4.5	5	5	5	5	5	5
EBM/Preterm Milk Formula	9	5.5	5.5	5.5	5.5	5.5	5.5	6	6	6	6	6	6
EBM/Preterm Milk Formula	10	6.5	6.5	6.5	6.5	6.5	6.5	7	7	7	7	7	7
EBM/Preterm Milk Formula	11	7.5	7.5	7.5	7.5	7.5	7.5	8	8	8	8	8	8
EBM/Preterm Milk Formula	12	8.5	8.5	8.5	8.5	8.5	8.5	9	9	9	9	9	9
EBM/Preterm Milk Formula	13	9.5	9.5	9.5	9.5	9.5	9.5	10	10	10	10	10	10

Feeding Protocol for Infant 750-999gram

Type of Formula	Day of Feeding	Feeding Volume (Q4 hours)					
EBM/Preterm Milk Formula	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	2	1	1	1	1	1	1
EBM/Preterm Milk Formula	3	1	1	1	1	1	1

Minimal Enteral Feeding (MEF)

Type of Formula	Day of Feeding	Feeding Volume (Q4 hours)											
EBM/Preterm Milk Formula	4	1	1	1	1	1	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	5	2	2	2	2	2	2	2	2	2	2	2	2
EBM/Preterm Milk Formula	6	3	3	3	3	3	3	4	4	4	4	4	4
EBM/Preterm Milk Formula	7	5	5	5	5	5	5	6	6	6	6	6	6
EBM/Preterm Milk Formula	8	7	7	7	7	7	7	8	8	8	8	8	8
EBM/Preterm Milk Formula	9	9	9	9	9	9	9	10	10	10	10	10	10
EBM/Preterm Milk Formula	10	11	11	11	11	11	11	12	12	12	12	12	12
EBM/Preterm Milk Formula	11	13	13	13	13	13	13	14	14	14	14	14	14

Feeding Protocol for Infant 10000-1249 gram

Type of Formula	Day of Feeding	Feeding Volume (Q2 hours)											
EBM/Preterm Milk Formula	1	1	1	1	1	1	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	2	2	2	2	2	2	2	3	3	3	3	3	3
EBM/Preterm Milk Formula	3	4	4	4	4	4	4	5	5	5	5	5	5
EBM/Preterm Milk Formula	4	6	6	6	6	6	6	7	7	7	7	7	7
EBM/Preterm Milk Formula	5	8	8	8	8	8	8	9	9	9	9	9	9
EBM/Preterm Milk Formula	6	10	10	10	10	10	10	11	11	11	11	11	11
EBM/Preterm Milk Formula	7	12	12	12	12	12	12	13	13	13	13	13	13
EBM/Preterm Milk Formula	8	14	14	14	14	14	14	15	15	15	15	15	15
EBM/Preterm Milk Formula	9	16	16	16	16	16	16	17	17	17	17	17	17

Feeding Protocol for Infant 1250-1499 gram

Type of Formula	Day of Feeding	Feeding Volume (Q3 hours)							
EBM/Preterm Milk Formula	1	1	1	1	1	1	1	1	1
EBM/Preterm Milk Formula	2	2	2	3	3	4	4	5	5
EBM/Preterm Milk Formula	3	6	6	7	7	8	8	9	9
EBM/Preterm Milk Formula	4	10	10	11	11	12	12	13	13
EBM/Preterm Milk Formula	5	14	14	15	15	16	16	17	18
EBM/Preterm Milk Formula	6	19	19	20	20	21	21	22	22
EBM/Preterm Milk Formula	7	23	23	24	24	25	25	26	26
EBM/Preterm Milk Formula	8	27	27	28	28	29	29	30	30

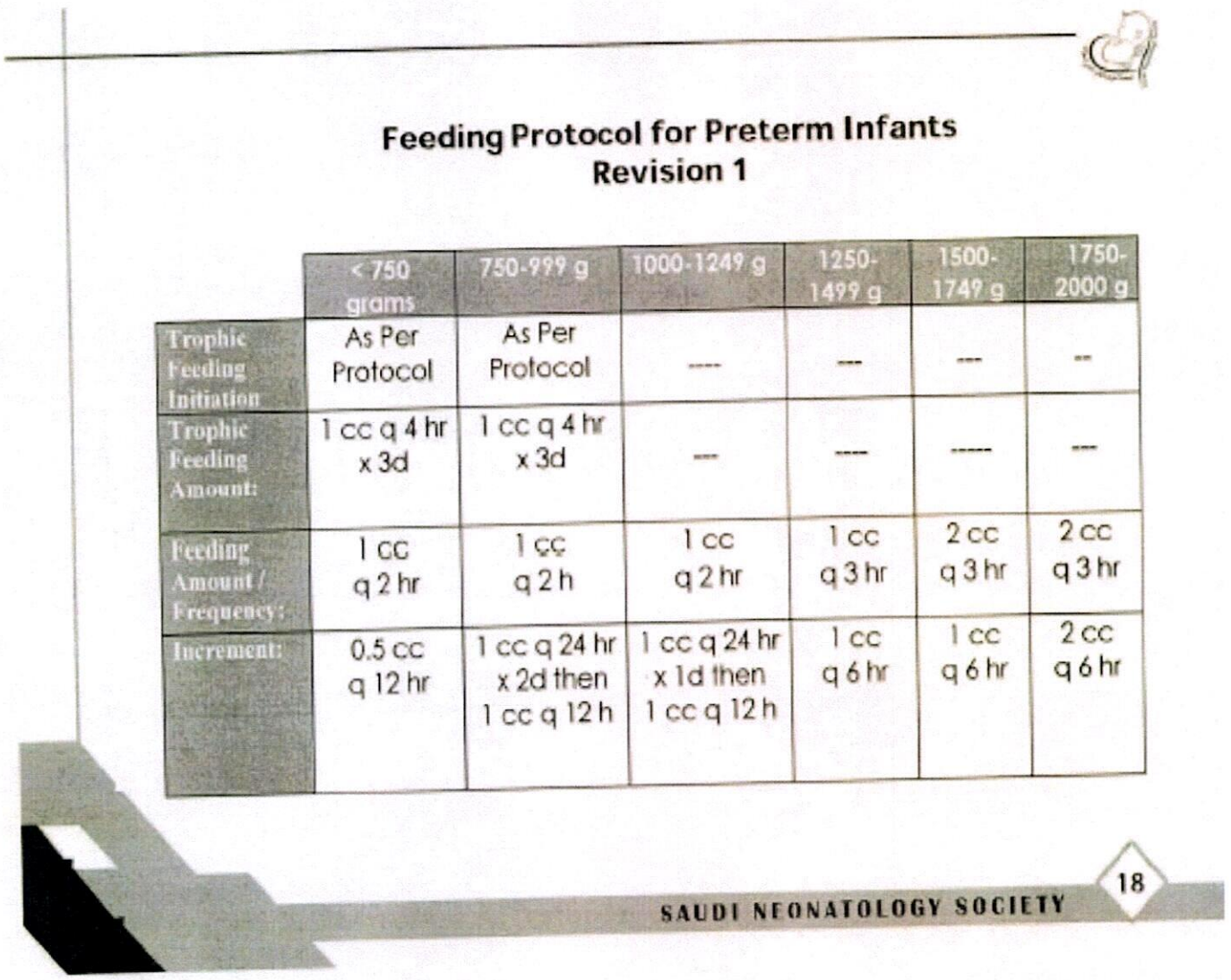
Feeding Protocol for Infant 1500-1749 gram

Type of Formula	Day of Feeding	Feeding Volume (Q3 hours)							
EBM/Preterm Milk Formula	1	2	2	2	2	2	2	2	2
EBM/Preterm Milk Formula	2	3	3	4	4	5	5	6	6
EBM/Preterm Milk Formula	3	7	7	8	8	9	9	10	10
EBM/Preterm Milk Formula	4	11	11	12	12	13	13	14	14
EBM/Preterm Milk Formula	5	15	15	16	16	17	17	18	18
EBM/Preterm Milk Formula	6	19	19	20	20	21	21	22	22
EBM/Preterm Milk Formula	7	23	23	24	24	25	25	26	26
EBM/Preterm Milk Formula	8	27	27	28	28	29	29	30	30
EBM/Preterm Milk Formula	9	31	31	32	32	33	33	34	34

Feeding Protocol for Infant 1750-2000 gram

Type of Formula	Day of Feeding	Feeding Volume (Q3 hours)							
EBM/Preterm Milk Formula	1	2	2	2	2	2	2	2	2
EBM/Preterm Milk Formula	2	4	4	6	6	8	8	10	10
EBM/Preterm Milk Formula	3	12	12	14	14	16	16	18	18
EBM/Preterm Milk Formula	4	20	20	22	22	24	24	26	26
EBM/Preterm Milk Formula	5	28	28	30	30	32	32	34	34
EBM/Preterm Milk Formula	6	36	36	38	38	40	40	42	42

Appendices 7.3 Feeding protocol table of Saudi Neonatology Society



Feeding Protocol for Preterm Infants
Revision 1

	< 750 grams	750-999 g	1000-1249 g	1250-1499 g	1500-1749 g	1750-2000 g
Trophic Feeding Initiation	As Per Protocol	As Per Protocol	----	---	---	--
Trophic Feeding Amount:	1 cc q 4 hr x 3d	1 cc q 4 hr x 3d	---	----	-----	---
Feeding Amount / Frequency:	1 cc q 2 hr	1 cc q 2 h	1 cc q 2 hr	1 cc q 3 hr	2 cc q 3 hr	2 cc q 3 hr
Increment:	0.5 cc q 12 hr	1 cc q 24 hr x 2d then 1 cc q 12 h	1 cc q 24 hr x 1d then 1 cc q 12 h	1 cc q 6 hr	1 cc q 6 hr	2 cc q 6 hr

SAUDI NEONATOLOGY SOCIETY 18

7.4 APPENDIX

Preterm Infants Vitamin and Mineral Supplementation Guidelines

1. **Birth weight <1500g or born at <32 weeks, add the following:**
   1.1 Multivitamins (contain 400 IU of Vit. D) once, daily, when they reach full feeds, until discharge. The dose of multivitamins will depend on manufacturer's recommendation.
   1.2 Ferrous sulphate 2-4 mg/kg/day, once daily at age of 4 weeks or at discharge, whichever comes first.
2. Infants receiving treatment with erythtopoietin require iron supplementation on commencement.
3. **Iron and/or vitamins may be commenced in some infants who do not fit the above criteria. These may include:**
   3.1 Infants at risk of nutritional deficiency (e.g. mal-absorptive diseases, long term parenteral nutrition, fluid restrictions (<160 ml/kg/day), gastrointestinal tract losses, and infants of mothers who are known to have or at risk of nutritional deficiencies).
   3.2 Babies at high risk of iron deficiency.
4. The recommended daily neonatal intake of Vitamin D is I0 ug or 400IU. This is provided by >/=180 ml/kg/day of fortified EBM or preterm formula because breastmilk fortifier and preterm formula have higher levels of vitamins and minerals.
5. Babies on unfortified EBM, term, or hydrolysed which have much lower levels of vitamins and minerals need Vitamin D 400 IU daily.

7.5 APPENDIX

Discharge Feeding and Supplementation Guidelines

1. **All birth weights:**
   1.1 FeSO4 – total 2-4mg Fe/kg (by 4 weeks of age until 1 year corrected gestational)
2. **Birth weight less than 1500g:**
   2.1 Premature formula 22 (0.74 kcal/ml)
   2.2 Multivitamins, orally, daily, until body weight of 4kg is achieved. Then, change to Vitamin D 400IU, once, daily. The dose of multivitamins will depend on manufacturer's recommendation.
3. **Birth weight greater than 1500g:**
   3.1 Regular formula 20 (0.68 kcla/ml)
   3.2 Multivitamins, orally, daily, until body weight of 4kg is achieved. Then, change to Vitamin D 400IU, once, daily. The dose of multivitamins will depend on manufacturer's recommendation.
4. Breastfeed and partially breastfeed infants should be supplemented with 400IU/day of Vitamin D beginning in the first few days of life.
5. Supplementation should be continued unless the infant is weaned to at least 1L/day or 1qt/day of vitamin D-fortified formula or whole milk. Whole milk should not be used until after 12 months of age.
6. For those children between 12 months and 2 years of age for whom overweight, or obesity is a concern or who have a family history of obesity, dyslipidemia, or cardiovascular disease, the use of reduced fat milk would be appropriate.
7. All non-breastfeed infants, as well as older children who are ingesting <1000ml/day of vitamin D-fortified formula or milk, should receive a vitamin D supplement of 400IU/day. Other dietary sources of vitamin D, such as fortified foods, may be included in the daily intake of each child.

7.6 APPENDIX

Abdominal Girth (AG) Measurement Guidelines

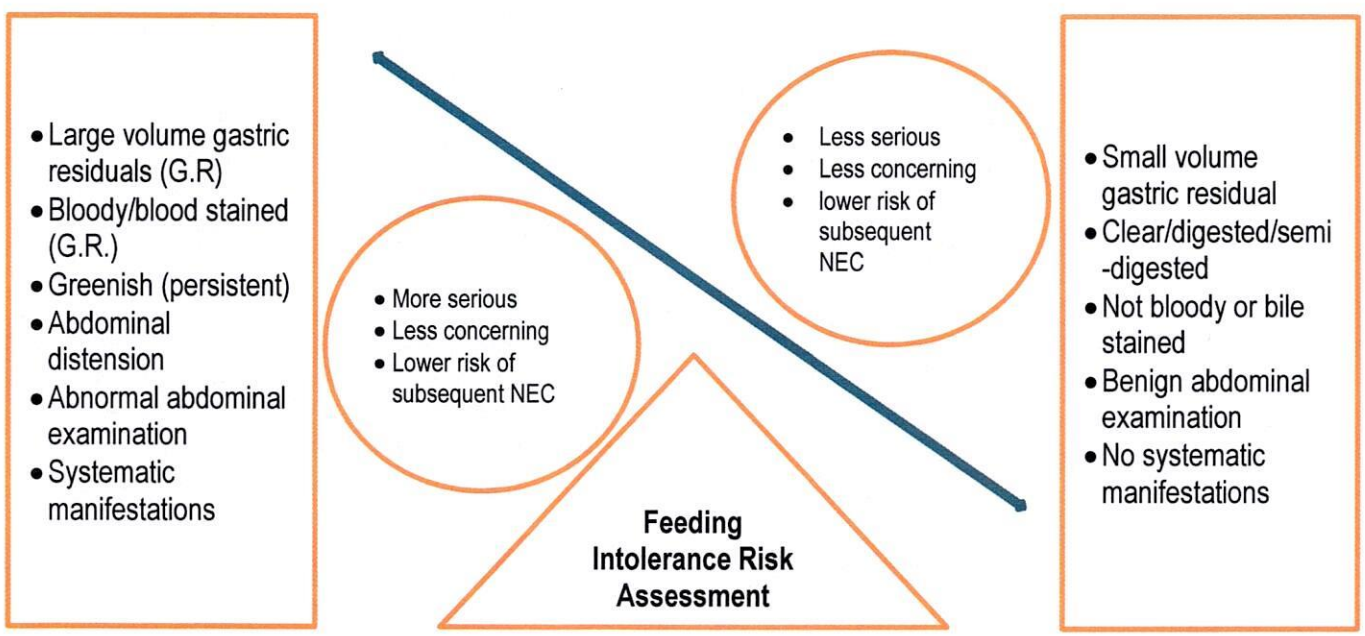
- AG measurements should be clustered with cares (Q3h, Q4h, Q6h).
- The tape measure is always placed immediately above the umbilicus.
- AG measurements are performed with other abdominal assessments such as palpating the abdomen (soft vs. firm, tender vs. non tender), and noting any discoloration, veiny, visible loops, bloody stools, ↑ gastric residuals.
- Once a baby reaches 2 months of age (regardless of gestation) and is on fell feeds, AG measurements can be discontinued.
- Babies with ileostomies do not need AG measurements.

7.7 APPENDIX

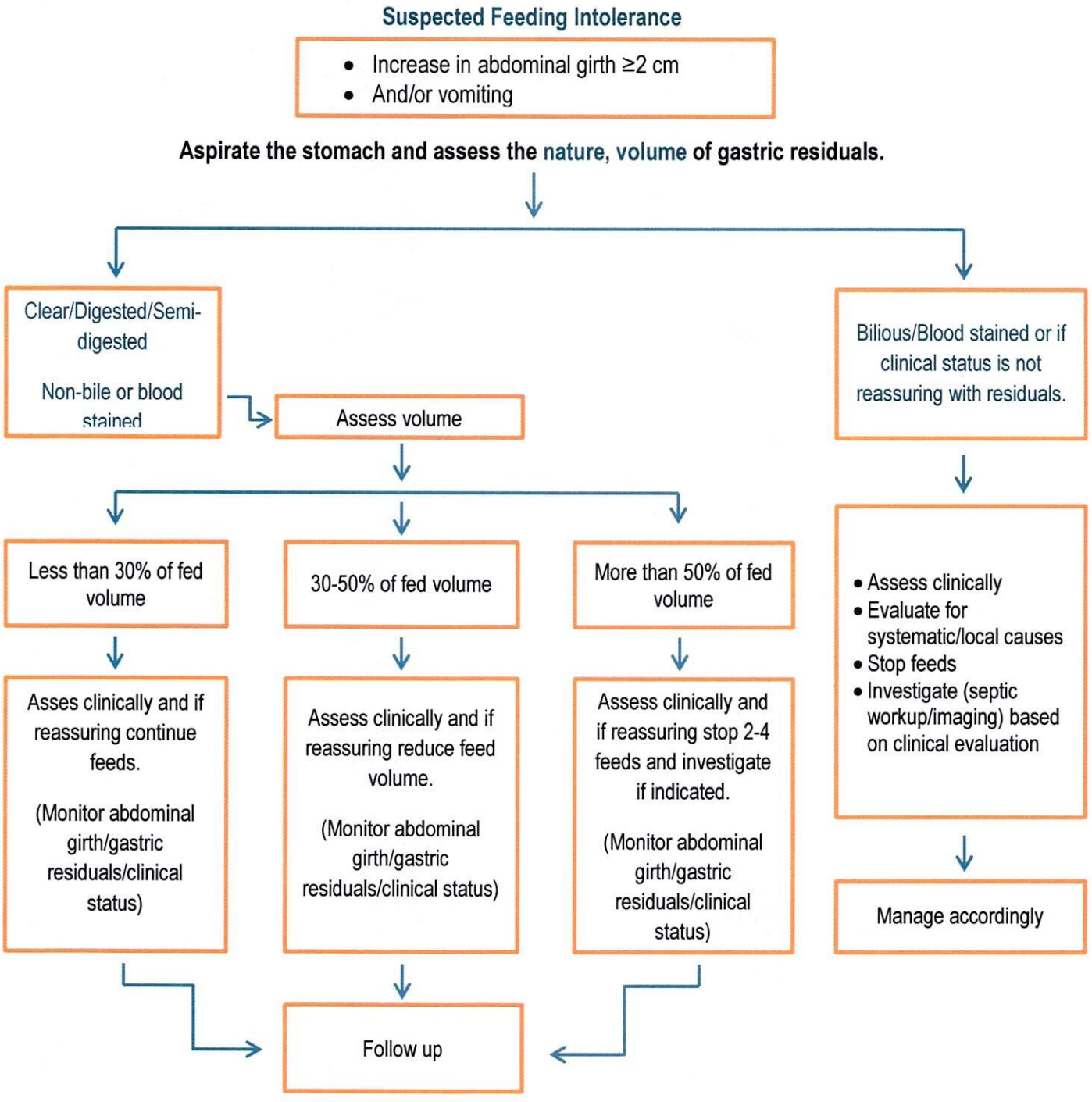
American Academy of Pediatrics Clinical Reports 2008

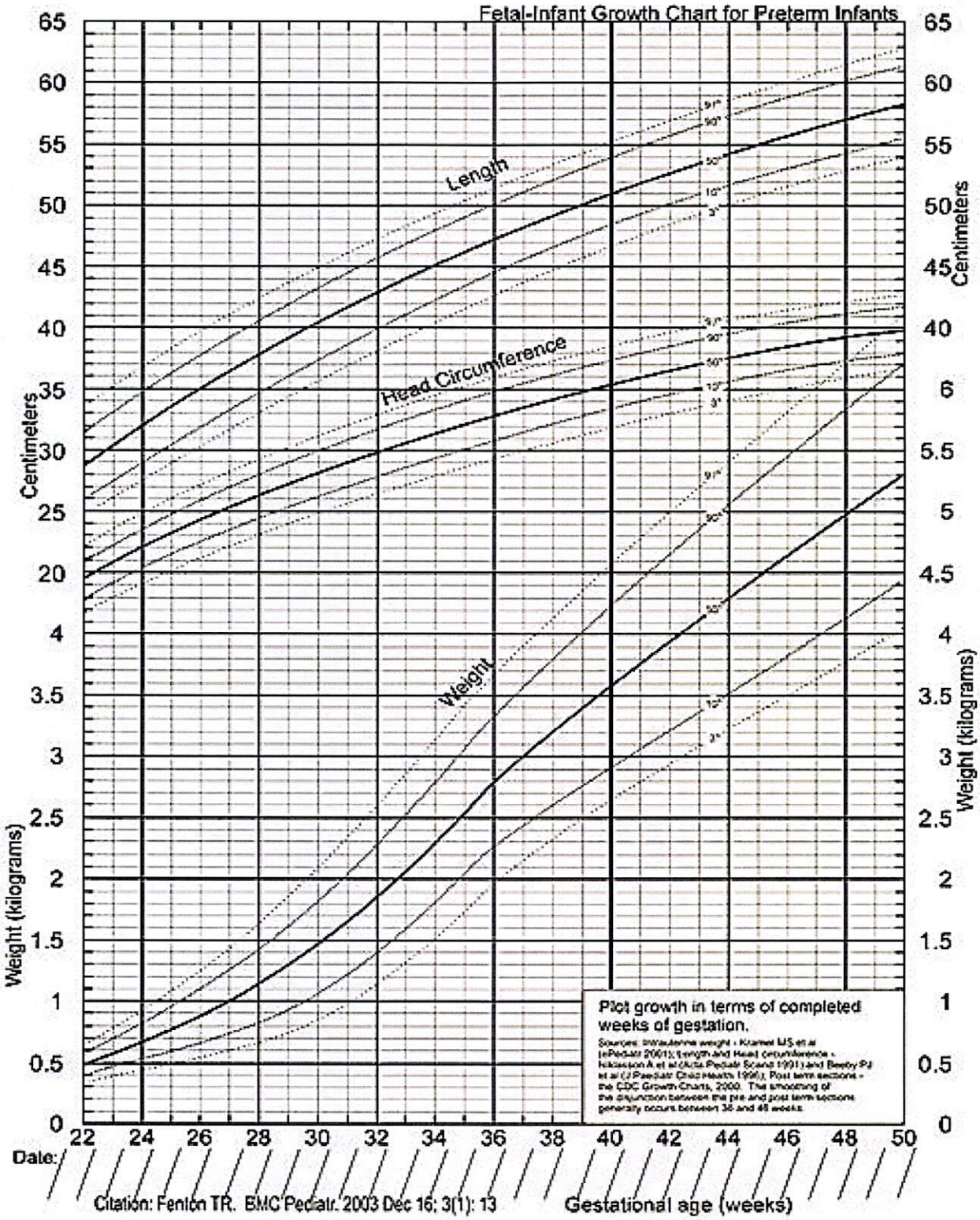
	Nasal	Oral	Indwelling
Advantage	• Does not interfere with breast or bottle feeding.	• Less traumatic insertion. • Less impact on respiration.	• Less frequent trauma/distress from insertion especially if infant has active gag or vagal reflex.
Limitations	• May interfere with respiration. • Cannot be used if infant has any nasal ventilation, CPAP or oxygen delivery system.	• May interfere with oral breast or bottle feeding. • Easier for infants to dislodge. • May contribute to oral aversion.	• May be a constant irritation to infants.

Feeding Intolerance Risk Assessment



Initial Approach to Suspected Feeding Intolerance




Fetal-Infant Growth Chart for Preterm Infants
Length
Head Circumference
Weight
Centimeters
Weight (kilograms)
Centimeters
Weight (kilograms)
Plot growth in terms of completed weeks of gestation.
Date:
Citation: Fenton TR. BMC Pediatr. 2003 Dec 16; 3(1): 13
Gestational age (weeks)