

FORMULA FEEDING FOR A NEONATE

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Ensure a woman who is unable to breastfeed or who has made an informed decision not to breastfeed or to mix feed, is respected and supported by all staff
- Ensure woman/carer leaving the facility using formula is given education and information on the safe preparation, storage and handling of reconstituted powdered formula, using NHMRC Guidelines
- Ensure safe suppression of lactation if required

2. PATIENT

- Neonate
- Woman/carer

3. STAFF

- Midwifery, nursing and medical staff

4. EQUIPMENT

- Sterilised water
- Single use bottle, teats and caps or own sterilised bottles, teats, caps, seals

5. CLINICAL PRACTICE

- Document signed consent form (Consent for Supplementary Formula Feeding of Breastfed Newborn) and place in neonatal medical record
- Demonstrate and educate cleaning and sterilising of all feeding equipment
- Demonstrate and supervise woman/carer with preparation and feeding of formula
- Document in medical records and neonatal feeding chart
- Document details of amount, type taken and method of administration of formula
- Document reason for use of formula
- Discuss strategies to manage suppression that are relevant and acceptable to the woman depending upon her circumstances. Refer to RHW LOP on Suppressing of Lactation or Weaning and provide woman with SESLHD fact sheet – “Weaning or Suppressing Lactation” https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/SGH/services/wch/documents/Breastfeeding_WeaningSuppressing_SESLHD2014.pdf
- Refer the woman to her local Child and Family Health clinic at discharge, for further information on formula feeding

Preparation of Formula in Postnatal Services

- Demonstrate and supervise the woman/carer until competent. This is to be performed by appropriately trained staff
- Ensure woman/carer is aware of clean location for formula preparation
- Provide SESLHD fact sheets:
 - a. Preparing formula feeds and sterilising https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/SGSHHS_CFHN/documents/PreparingFormulaFeedsandSterilisingBottles.pdf
 - b. RHW Formula Feeding Information for Parents (Appendix 1)
- Instruct woman/carer on hand hygiene prior to formula preparation
- Advise use of single use bottles, teats and caps and bottled sterile water. There is no evidence to support any particular teat or bottle for problems such as an unsettled neonate or colic

FORMULA FEEDING FOR A NEONATE cont'd

- Read instructions to check the correct amount of water and powder that is needed, as this may vary between different formulas
- Prepare formula just before a feed
- Check correct formula and sterile water with two nurses/midwife, or one nurse/midwife and the woman/carer
- Pour water into bottle first
- Use the scoop provided in the formula can, as scoop sizes differ between formulas
- Fill measuring scoop with powder. Tap the scoop lightly to remove air bubbles then level off scoop. Add the powder to the water in the bottle and shake well
- Return scoop to can without washing as this can introduce moisture into can if not dried well
- Cap bottle and shake well
- Test flow rate by holding a bottle of room temperature milk mixture upside down. Milk flow should drip steadily without pouring out in a stream
- Warm formula by placing bottle of formula in a container of warm water (no hotter than 37^o Celsius)
- Do not use microwave to heat formula due to uneven heat distribution
- Test temperature of milk by placing a few drops on woman/carer's wrist. Milk should feel warm not hot
- Feed neonate, which should not take longer than 1 hour
- Discard any formula left at end of feed. Discard teat and cap. Place bottle into recycling bin

Preparation of formula in hospital – Newborn Care Centre (NCC)

- Perform all of the above
- Refrigerate prepared formula if needed and use within 24 hours
- Warm feed by placing bottle into the milk warmer

Prior to discharge – additional instructions for preparation of formula at home

- Wash and rinse all feeding equipment carefully
- Sterilise all feeding equipment by one of the following methods:
 - boiling for five minutes:
 - Submerge all equipment under water
 - Boil in a large saucepan for five minutes
 - Allow to cool then remove and store sterilised equipment in clean container at the back of the fridge
 - chemical sterilising agents as per manufacturer's instructions
 - steam steriliser as per manufacturer's instructions
 - microwave steam steriliser as per manufacturer's instructions
- Resterilise all unused feeding equipment every 24 hours

Good Feeding Practice

- Make feeding a comfortable experience for the woman/carer and neonate
- Educate woman/carer to hold, cuddle and talk to neonate and respond to neonatal feeding cues

FORMULA FEEDING FOR A NEONATE cont'd

- Educate woman/carer to offer at least eight feeds every 24 hours. Using the following table for approximate formula requirements as a guide only:

Age of Neonate	Approximate Formula Requirements
Days 1 to 4	Commence at 30-60mL/kg/day Increase over next few days Preterm and/or unwell - as directed by neonatologist/neonatology team
Day 5 to 3 months	150 mL/kg/day Preterm and/or unwell neonate will require 180-200mL /kg/day or as directed by neonatologist/neonatology team

- Educate woman/carer that it is recommended to prepare one feed at a time. If preparing in advance, must be refrigerated at 5° C and used within 24 hours
- Educate woman how to assess neonate is getting enough formula e.g. ≥ 5 wet nappies/24 hours, soft stools, and neonate is gaining weight (150-200g/week)
- Educate woman/carer not to leave neonate to feed on their own (e.g. bottle propped) as this is a choking hazard
- Educate woman not to put neonate to sleep while feeding from a bottle. This is a choking hazard and may cause ear infections and dental caries

6. DOCUMENTATION

- Medical record

7. EDUCATIONAL NOTES

- Relevant staff must have the knowledge and be responsible for demonstrating safe practice in preparing, feeding, storing and transporting formula
- Relevant staff must understand their responsibilities under the World Health Organisation (WHO) International Code for the use of breastmilk substitutes and its subsequent relevant World Health Assembly (WHA) Resolutions and the Australia New Zealand Food Standards Code
- Advice should include:
 - Formula is to be used until neonate is twelve months of age
 - Costs of formula feeding
 - Risks of incorrect formula preparation and storage
 - Safe formula feeding depends on safe water supply, sufficient income to meet costs, effective refrigeration, clean surroundings and satisfactory arrangements for preparing formula consistent with Australian Dietary Guidelines
- Instruction is only given to the woman/carer who needs it. There is no group instruction. The demonstration occurs away from breastfeeding women in a private, clean area
- For types of formula available, see Appendix 2
- Relevant staff must check that formula is being prepared safely. Parents with low literacy skills or from a culturally and linguistic diverse (CALD) background will require extra assistance e.g. interpreter
- Ensure the woman/carer is aware of formula feeding resources on the following website: www.raisingchildren.net.au/
- Incorrect choice, preparation, administration or cleaning of feeding equipment can lead to infections, over or under concentrations of formula, scalding and choking
- Rooming-in, skin to skin contact and demand feeding apply to all women/carers and neonates
- Ready to drink formula products are available in aseptically packed glass bottles for hospital use and in aseptically packed tetra packs for domestic use
- Ready to drink formulas can be decanted into sterilised bottles provided these bottles are refrigerated below 5°C and used within 24 hours

FORMULA FEEDING FOR A NEONATE cont'd

- Regular monitoring of neonatal progress is important. Formula-fed neonates can have firmer and fewer stools. Constipation can occur. Hard, dry stools may indicate incorrect preparation of formula.
- Cow's milk-based formula is suitable and recommended for most healthy term neonates over formulas made from soybeans, goat's milk or modified lactose formula unless medically indicated
- Prescribed formulas should only be used for medically diagnosed conditions
- Changing the type of formula because of minor rashes, irritability or neonate/carer distress is usually of no benefit
- All modern formulae contain reduced protein and electrolyte levels and have added iron and vitamins (A, B group, C, D, E and K) and other nutrients
- If formula is required as a supplementary feed for a breastfed neonate, use alternative feeding methods such as spoons and cups.
- Do not mix breastmilk and formula in the same container
- Research indicates formula products are unable to duplicate the variety of nutrient and active factors present in human milk or the changing nature of human milk during the course of the feed

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Preparing formula feeds and sterilising bottles. NSW Health 2018. Patient information leaflets
- Suppression of Lactation and Weaning

9. RISK RATING

- Medium

10. NATIONAL STANDARD

Standard 5 - Comprehensive Care Standard

11. REFERENCES

- 1 Appleton, J, Laws, R, Russell, C. G, Fowler, C, Campbell, K. J, & Denney-Wilson, E. 2018, 'Infant formula feeding practices and the role of advice and support: an exploratory qualitative study', *BMC pediatrics*, vol 18, no, 1, 12
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5784678/pdf/12887_2017_Article_977.pdf
- 2 Australian College of Midwives. 2016, Baby Friendly Health Initiative Australia. BFHI Handbook for Maternity Facilities, Australia
https://www.midwives.org.au/sites/default/files/uploaded-content/website-content/BFHI/bfhi_handbook_for_maternity_facilities_v3_20161028_0.pdf
- 3 Australian Government Federal Register of Legislation, Food Standards Australia New Zealand. Standards 2.9.1. Infant Formula Products, 2017, FSANZ Canberra
<https://www.legislation.gov.au/Details/F2017C00332>
- 4 Australian Government National Health and Medical Research Council Department of Health and ageing. Eat for Health. Infant Feeding Guidelines Summary 2012, NHMRC, Commonwealth of Australia 2013
http://www.eatforhealth.gov.au/sites/default/files/files/the_guidelines/n56_infant_feeding_guidelines.pdf
- 5 Australian Government National Health and Medical Research Council, 2013, Eat for Health: Australian Dietary Guidelines, NHMRC Canberra
<file:///C:/Users/MILESC/Downloads/australian-dietary-guidelines-2013.pdf>
- 6 Moore, E.R, Bergman, N, Anderson, G.C & Medley, N. 2016, 'Early skin-to-skin contact for mothers and their healthy newborn infants (Review)', *Cochrane Database of Systematic Reviews*, no.11,
<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003519.pub4/epdf/full>

FORMULA FEEDING FOR A NEONATE cont'd

- 7 [National Health Service UK, Types of formula milk, 2016, NHS, London UK](https://www.nhs.uk/conditions/pregnancy-and-baby/types-of-infant-formula/)
<https://www.nhs.uk/conditions/pregnancy-and-baby/types-of-infant-formula/>
- 8 [raisingchildren.net.au, Infant formula and bottle feeding, 2018, Royal Children's Hospital, Parkville, VIC](https://raisingchildren.net.au/newborns/breastfeeding-bottle-feeding/bottle-feeding/infant-formula)
<https://raisingchildren.net.au/newborns/breastfeeding-bottle-feeding/bottle-feeding/infant-formula>
- 9 The Australian Society of Clinical Immunology and Allergy (ASCIA) Infant Feeding Guidelines, 2016, 'Infant feeding and allergy prevention', ASCIA, Balgowlah NSW Australia
https://www.allergy.org.au/images/pcc/ASCIA_Guidelines_infant_feeding_and_allergy_prevention.pdf
- 10 The Royal College of Midwives, 2018. Position Statement on Infant feeding, RCM, London
<https://www.rcm.org.uk/sites/default/files/Infant%20Feeding.pdf>
- 11 Walker, M. 2015, 'Formula Supplementation of Breastfed Infants. Helpful or Hazardous?' *Infant, Child and Adolescent Nutrition*, vol. 7, no. 4, pp.198-207
<https://journals.sagepub.com/doi/pdf/10.1177/1941406415591208>
- 12 World Health Organization, 2018, Marketing of Breastmilk Substitutes: National implementation of the international code status report 2018, World Health Organization, Geneva, Switzerland <http://apps.who.int/iris/bitstream/handle/10665/272649/9789241565592-eng.pdf?ua=1>
- 13 [World Health Organization, 2018, Ten Steps to Successful Breastfeeding \(revised 2018\)](http://www.who.int/nutrition/bfhi/ten-steps/en/)
WHO, Geneva <http://www.who.int/nutrition/bfhi/ten-steps/en/>

REVISION & APPROVAL HISTORY

Endorsed Maternity Services LOPs 8/3/19

FOR REVIEW : MARCH 2022

APPENDIX1

ROYAL HOSPITAL FOR WOMEN

FORMULA FEEDING INFORMATION

FOR PARENTS



Foreword

We recognise some families chose not to or are unable to breastfeed. We will support and respect your choice of feeding method. Breastmilk is best for babies. Before you decide to formula feed, consult your doctor or health care worker.

WHO and UNICEF recommend:

- Early initiation of breastfeeding within 1 hour of birth;
- Exclusive breastfeeding for the first 6 months of life; and
- Introduction of nutritionally-adequate and safe complementary (solid) foods at 6 months together with continued breastfeeding up to 2 years of age or beyond.

The World Health Organization International Code of the Marketing of Breastmilk Substitutes requires that all information on artificial feeding should explain the benefits of breastfeeding, and the costs and hazards with artificial feeding

For more resources refer to links below:

<https://www.who.int/nutrition/publications/infantfeeding/9241541601/en/>

<https://www.who.int/nutrition/publications/infantfeeding/breastmilk-substitutes-FAQ2017/en/>

<https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>

REFERENCES

The International Code of Marketing of Breast-milk Substitutes: Frequently Asked Questions (2017 Update), Geneva, Switzerland, World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.

World Health Organization, 2018, Infant and young child feeding February 2018
<https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>

World Health Organization, 2018, Marketing of Breastmilk Substitutes: National implementation of the international code status report 2018, World Health Organization, Geneva, Switzerland, viewed 7 December 2018

CONTENTS

- **INFANT FORMULA**
 - **CHOOSING WHICH FORMULA TO USE**
 - **CHOOSING BOTTLES AND TEATS**
 - **CLEANING AND STERILISING BOTTLES, TEATS AND FEEDING UTENSILS**
 - **PREPARATION OF FORMULA FEEDS**
 - **HOW MUCH FORMULA TO FEED**
 - **GOOD BOTTLE FEEDING PRACTICE**
 - **DUMMIES/PACIFIERS**
 - **WEANING AND SUPPRESSION OF LACTATION**

INFANT FORMULA

Most infant formula is made from modified cow's milk and has added vitamins, minerals and fats that your baby requires.

Infant formula is the only safe alternative to breastmilk for the first 12 months of your baby's life. Babies under 12 months of age should not have:

- + Cow's milk or unmodified cow's milk. The protein level in these milks is too high and babies are unable to digest them easily or completely. They are also low in vitamins and iron and a health risk to a baby's immature kidneys.
- + Skim, evaporated, powdered or sweetened condensed milk.
- + Dairy alternatives such as soy, rice or coconut milk.

All infant formula sold in Australia meets strict Australian Standards and Guidelines and is safe to use.



CHOOSING WHICH FORMULA TO USE

Most cow's milk- based infant formulas are of similar quality and nutritional value. A more expensive brand or the brand that is used by the hospital does not mean it is better for your baby.

Some formulas have ingredients added to make them more like breastmilk. This does not however guarantee the added ingredients will work the same way as breastmilk in your baby's body.

Infant formula can be bought in powder form or ready to drink. Both are safe to use however ready to drink is more expensive.

SPECIAL INFANT FORMULAS

For infants under 12 months the National Health and Medical Research Council recommends cow's milk-based formula over formulas made from soy beans, goats milk or modified lactose formula. These special formulas may, however, be used with babies with nutritional or medically diagnosed problems on the advice of a paediatrician.

SOY BASED FORMULA

- ✚ Made from soya beans and modified in a similar process to cow's milk-based formula.
- ✚ Used under medical supervision for galactosaemia.
- ✚ **Not recommended for pre-term babies and infants under 6 months of age.**
- ✚ **Not recommended for infants with thyroid disease due to possible interaction with thyroxine replacement medication.**
- ✚ There are risks and concerns about the high levels of phytoestrogens in the formula, (hormones that occur naturally in plants), as they can have negative effects on a baby's developing immune and reproductive function.
- ✚ No clear evidence this type of formula prevents or reduces risks of allergies.

HYDROLISED FORMULA

- ✚ This formula is cow's milk based with the difference being the proteins are processed and broken down into smaller particles.
- ✚ Modest evidence of benefits when used on infants at high risks of cow's milk allergies or cow's milk protein intolerance. For use under medical supervision.

PARTIALLY HYDROLISED / HA/ HYPOALLERGENIC FORMULA

- ✚ This formula is cow's milk based with the proteins only partially processed and broken down.
- ✚ Manufacturers suggest this can prevent food allergies or allergic diseases in babies, however no scientific evidence supports this.

AMINO ACID BASED (ELEMENTAL) FORMULA

- ✚ This formula is developed from man-made nutrients including individual amino acids.
- ✚ Used for infants with medical conditions such as malabsorption, colitis and multiple food protein allergies and only under medical supervision.

LACTOSE FREE FORMULA

- ✚ This is a cow's milk based formula with lactose removed.
- ✚ Not recommended as choice nutrition for infants.
- ✚ Primary lactose intolerance is rare.
- ✚ Short term use for temporary lactose intolerance, such as with gastroenteritis, and only under medical supervision.

GOAT'S MILK FORMULA

- ✚ Goat's milk based formula may be recommended for an older infant with cow's milk intolerance.

- ✚ Nil evidence indicating safety and role in prevention or treatment of allergic disease.
- ✚ Not recommended for feeding infants under 12 months of age.

OTHERS FORMULAS AND SPECIAL ADDITIVES

- ✚ Long chain polyunsaturated fatty acids, beta-carotene, antioxidants, pre and/or probiotics have been added to cow's milk based formula to make it similar to breastmilk.
- ✚ No clear evidence these additives can be readily absorbed by baby when added to formula.
- ✚ These formulas are more expensive.

READY TO DRINK FORMULA

- ✚ Liquid ready to drink formulas products are available in aseptically packed tetra packs.
- ✚ Can be poured into sterilised bottle and warmed just before feeding.
- ✚ Opened tetra packs must be poured into numerous sterilised bottles, stored in the back of the fridge and used within 24 hours.
- ✚ Any unfinished ready to drink formula must be discarded after feed.

HOME MADE FORMULA

- ✚ Using bone broth and other ingredients is not advised as suitable alternative to breastmilk or cow's milk based formulas.
- ✚ Homemade formula may contain ingredients that are not safe for an infant.

FOLLOW ON FORMULA

- ✚ There is no clear evidence on benefits or advantages of a follow on formula.
- ✚ Recommendations from the National Health and Medical Research are to use starter or first formula from birth to 12 months.

CHOOSING BOTTLES AND TEATS

BOTTLES

- ✚ Standard clear plastic or glass bottles are best to use.
- ✚ Novelty shaped bottles are more difficult to clean.
- ✚ If using plastic bottles ensure the bottles are bisphenol (BPA) free.
- ✚ Shape of bottle should fit comfortably in your hand.

TEATS

- ✚ There are a variety of shapes and sizes.
- ✚ Silicon teats are recommended over rubber teats due to the chemical content of rubber.
- ✚ Flow rate is tested by holding bottle of room temperature formula upside down. The formula should drip steadily, without pouring out in a stream.
- ✚ If the teat allows the baby to complete the feed within 20-30 minutes the flow rate is suitable.

- ✚ There is no evidence to support orthodontic or winged teats.

CLEANING AND STERILISING BOTTLES, TEATS AND FEEDING UTENSILS

- ✚ An infant's immune system is not strong to fight infections.
- ✚ Cleaning and sterilising all infant feeding equipment is necessary until the infant is 12 months of age.
- ✚ Thorough cleaning of all bottles and teats are required prior to sterilising.
- ✚ All bottle feeding equipment must be cleaned and sterilised after every feed.

CLEANING

- ✚ Have a clean area for formula preparation and equipment cleaning.
- ✚ Wash hands.
- ✚ Rinse all bottles and teats first in cold water as this prevents the proteins in formula from sticking to the plastic.
- ✚ Wash bottles, teats, dummies and utensils in hot soapy water.
- ✚ Clean carefully around the screw top of bottles with a bottle brush that is only used for baby feeding equipment.
- ✚ Rinse all bottles, teats and utensils well.



STERILISING BOILING

- ✚ Preferred method. Most consistent and reliable results.
- ✚ Use large saucepan with lid.
- ✚ Submerge cleaned bottles, teats, dummies and other feeding utensils under water and cover with lid.
- ✚ Bring water to boil and boil another 5 minutes.
- ✚ Allow saucepan to cool, then wash your hands before you remove all items.

- ✚ Place caps and teats on the bottle.
- ✚ Place capped bottles at the back of the fridge.
- ✚ These bottles can be stored for 24 hours then they need to be re washed and sterilised.



STEAM STERILISERS – ELECTRONIC or MICROWAVE

- ✚ With steam sterilisers it is Important to follow the manufacturer's directions on use.
- ✚ Place all infant feeding equipment into unit provided.
- ✚ Add water as per manufacturer's direction
- ✚ If unit is electronic, turn switch on.
- ✚ If using microwave steam unit, place equipment in unit provided then place in microwave and heat for recommended time.
- ✚ Do not place metal in microwave.
- ✚ When process completed, wash hands and remove feeding equipment.



PREPARATION OF FORMULA FEEDS

Important

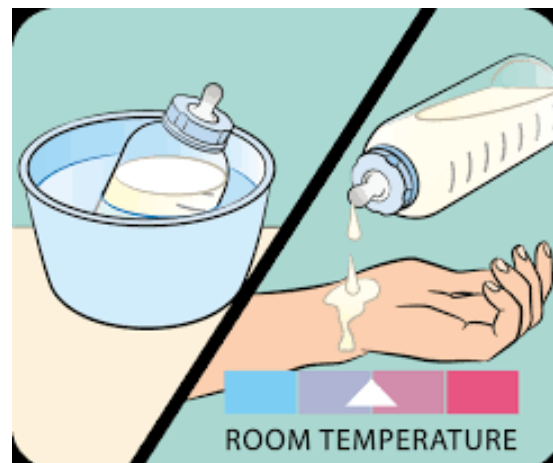
- ✚ Follow instructions on the can for the correct amount of water per scoop.
- ✚ Too many scoops can cause unhealthy weight gain and can stress a baby's kidneys.
- ✚ Too few scoops can cause insufficient weight gain.
- ✚ Do not use microwave to heat formula bottle as this can burn baby's mouth.



Steps to reduce risks of infection in baby

- ✚ It is recommended that a formula feed is made up one at a time when baby is ready to feed.
- ✚ Always wash hands before preparing the feed.
- ✚ Ensure clean preparation area and all infant feeding equipment has been cleaned and sterilised.
- ✚ Boil fresh cold tap water. Don't use bottled water.

- ✚ Allow to cool until lukewarm. If using automatic kettle wait until kettle switches off and allow to cool for 30 minutes.
- ✚ Do not re boil the water as this concentrates mineral salts in the water.
- ✚ Pour correct amount of water into the bottle first then the scoop/s of formula powder.
- ✚ Always use the measuring scoop provided with the can. Amount of formula varies with different cans of formula.
- ✚ Discard scoop when can is finished.
- ✚ Add correct amount of scoops of formula powder to water by:
 - Filling the scoop and tapping lightly to remove air bubbles. Do not press down on scoop as this will over concentrate the amount of powder.
 - Level each scoop with levelling device provided or the back of a sterilised knife.
- ✚ If using sachets of formula, ensure to use entire sachet to recommended amount of water.
- ✚ Replace teat and cap on bottle. Shake bottle until powder dissolves.
- ✚ Before feeding baby, check formula is the correct temperature by shaking a few drops onto the inside of wrist. The formula should feel warm not hot.



- ✚ All formula left at room temperature for more than 1 hour has to be discarded.
- ✚ **If preparing feeds in advance**, prepared sterilised bottles of boiled water can be refrigerated and used as needed. First warm the bottle in a container then add the formula powder.
- ✚ Prepared feeds must be stored in the back of the fridge at 5 degrees Celsius and used within 24 hours.

Transporting formula feeds

- ✚ Prepare feed and place in the refrigerator.
- ✚ Ensure feed is cold before transporting.
- ✚ Do not remove the feed from the refrigerator until immediately before transporting.
- ✚ Transport the feed in a cool bag with ice packs.

- ✚ Use feeds transported in a cool bag within 2 hours.
- ✚ Re warm feed at the destination.
- ✚ If destination is reached within 2 hours, feed transported can be refrigerated and used within 24 hours from time of preparation.

HOW MUCH FORMULA TO FEED

- ✚ It is normal for baby to only need small amounts per feed in the first few days.
- ✚ Babies commonly will have 8-10 feeds a day.
- ✚ The volume will gradually increase.
- ✚ A baby is feeding well and getting enough formula if there are at least 5 heavy wet nappies per day and stools are not hard or dry, and baby is gaining weight.
- ✚ It is important to respond to baby's natural feeding cues and feed baby to need.
- ✚ It is important to be aware that information on formula packages recommending certain amounts for various ages is a guide only. Below is a guide to the amounts to offer baby and may not necessarily suit every baby.

Stomach capacity of a baby



Approximate Formula Requirements

Days 1 to 4	<ul style="list-style-type: none"> Commence at 30ml/kg/day. Increase over next few days
Day 5 to 3 months	<ul style="list-style-type: none"> 150 ml/kg/day Preterm will require 180-200ml/kg/day
3 to 6 months	<ul style="list-style-type: none"> 120ml/kg/day
6 to 12 months	<ul style="list-style-type: none"> 100ml/kg/day Some infants may reduce to 90mg/kg/day Infants this age also take solid foods

Baby Feeding Cues (signs)



EARLY CUES - "I'm hungry"



• Stirring



• Mouth opening



• Turning head
• Seeking/rooting

MID CUES - "I'm really hungry"



• Stretching



• Increasing physical movement



• Hand to mouth

LATE CUES - "Calm me, then feed me"



• Crying



• Agitated body movements



• Colour turning red

Time to calm crying baby

- Cuddling
- Skin to Skin on chest
- Talking
- Stroking



© State of Queensland (Queensland Health) 2012



<http://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en>

For permissions beyond the scope of this license contact: Intellectual Property Officer, email ip_officer@health.qld.gov.au, phone (07) 3234 1479.

(HIMMU 131022)

The Royal Brisbane and Women's Hospital is acknowledged as source of this document.

GOOD BOTTLE FEEDING PRACTICE

- ✚ Make feeding a comfortable experience.
- ✚ It is important to hold baby close, fairly upright and well supported for every feed.

- ✚ Have eye contact with baby as feeding is good time for social interaction and will help make baby feel safe and loved.
- ✚ Hold, cuddle and talk to infant and respond to baby's feeding cues.
- ✚ **It is important not to prop baby or leave baby unattended to feed or sleep with a bottle.** This can cause choking, ear infections, stomach infections and later tooth decay.
- ✚ Check temperature of the baby formula is warm by testing a few drops of milk onto the wrist.

WHEN FEEDING BABY WITH A BOTTLE

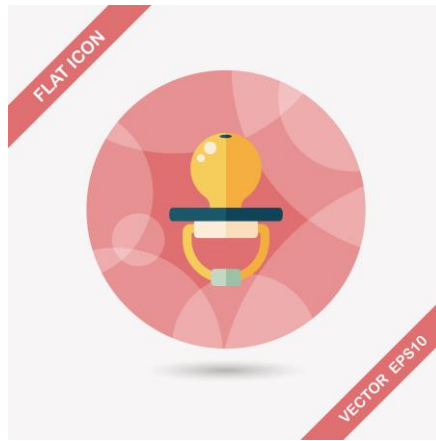


- ✚ Gently touch the teat to the baby's lips. **Do not force the teat in.**
- ✚ Baby will open mouth wide with tongue down, so then place the teat into his/her mouth.
- ✚ When baby is sucking well, bubbles will be seen in the bottle as baby feeds.
- ✚ **Pace the feed** according to baby's needs and remove teat at frequent intervals to enable baby to have a rest and decide if baby is full or wants more.
- ✚ Avoid over feeding baby
 - Giving more formula will not necessarily enable baby to sleep longer.
 - Using fast flow teats can make it difficult for baby to control their breathing if they are forced to swallow large amounts of milk quickly.
- ✚ If baby is becoming distressed during the feed, sit baby up and check if baby needs to burp. Also check if the teat flow is too fast then continue with feed if baby needs more.
- ✚ Most babies feed for 20 – 30 minutes.
- ✚ **If feeding is too fast there is a risk of:**
 - The baby not sensing when they are full and may overfeed and become distressed.
 - Choking or vomiting.
- ✚ **If feeding always takes longer than 40 minutes:**

- There may be a problem with the teat.
- Formula was incorrectly made.
- Baby is unwell or has a sucking problem.
-
- + If you have concerns about your baby's feeding, have your baby assessed by:
 - Midwife or nurse at while in hospital.
 - Your local Child and Family Health Nurse.
 - Your G.P.

DUMMIES / PACIFIERS

- + Use of dummies/pacifiers are a personal choice.
- + It may be protective against SIDS when used at night for formula fed babies as formula fed babies may sleep more deeply.
- + There is no evidence to indicate any particular style e.g. orthodontic is effective in shaping mouth or teeth.
- + Dummies/pacifiers must be cleaned and disinfected daily for the first 6 months.
- + Do not clean dummies/pacifiers which may have dropped on the ground by putting in your mouth. This will increase risks of infection baby.
- + Wash dummies/pacifiers under clean water, cleanse with a detergent and rinse with clean warm water if it has fallen on the ground.
- + **Risks of regular dummies/pacifier use:**
 - Infection e.g. stomach, ear, mouth.
 - Impact on shape of palate and front teeth.
 - Possible impact on speech.
- + **Safe use of dummies/pacifiers.**
 - Look for a one-piece model with a soft nipple. Dummies made in two pieces can break apart and become choking hazards.
 - Look for a firm plastic shield with air holes. Check the shield is more than 3 cm across so your baby can't put the whole thing in her mouth.
 - If your baby is younger than six months old, choose a dummy that can go into the dishwasher or be boiled.
 - No ribbons or cords to attach dummies to baby's clothes- this is a choking risk.
 - Do not dip into honey or sweetened liquid as this can cause health problems and later tooth decay.



WEANING AND SUPPRESSION OF LACTATION

IMMEDIATELY AFTER BIRTH or ABRUPT WEANING

- ✚ It is normal for your breasts to fill with milk by the 3rd or 4th day after baby is born.
- ✚ To minimise discomfort:
 - Avoid unnecessary breast stimulation.
 - Express breast only for comfort.
 - Wear a firm supportive bra or top.
 - Apply cool cloths, gel packs or cabbage leaves as needed.
 - Drink and eat as normal.
 - Allow breasts to leak freely.
 - May use pain relief as prescribed e.g. Panadol (Paracetamol).

MEDICATION USED TO WEAN

- ✚ Cabergoline (Dostinex) can be prescribed by the doctor to suppress breastmilk production.
- ✚ This is **not usually a first option** as there are **side effects** which include;
 - Dizziness.
 - Nausea.
 - Headaches.
 - Lowering of blood pressure.
 - Interaction with some medication.
- ✚ If decision has been made to use this medication, the recommended most effective dosage is:
 - **1 mg Cabergoline (Dostinex) during the first day but preferably within the first 12 hours or**
 - **Divided dose of 250micrograms (every 12 hours) over 2 days.**

GRADUAL WEANING

- ✚ If decision to suppress lactation/wean after commencing breastfeeding, it is advised to do so gradually.

✚ Do this by:

- Reducing number of breastfeeds given to baby each day.
- Replace each reduced breastfeed with a formula feed.
- When your breasts are comfortable between reduced breastfeeds then reduce another breastfeed and replace it with a formula feed.
- If you were expressing feeds, allow more time between expressing. E.g. if you were expressing every 3 hours, stretch the time to 4 hours. When your breasts have adjusted and is comfortable allow 5 hours between expressing times and so on.
- When you are only breastfeeding or expressing once or twice a day, then only express or breastfeed for comfort until no longer needed.
- All mothers are unique. Weaning can take a few weeks. For further guidance please seek advice from a health professional e.g. The Australian Breastfeeding Association, Local Child and Family Health, G.P.

FOR MORE INFORMATION ON FORMULA FEEDING

✚ Refer to your Child and Family Health Nurse.

APPENDIX 2

The Australian Society of Clinical Immunology and Allergy (ASCIA) Infant Feeding Guidelines.2016

NAME	MODIFICATION	MANUFACTURER CLAIM	EVIDENCE
Hydrolysed (1st choice- Whey) formulas	Cow's milk based. Proteins processed and broken down to smaller particles	May modify the development of allergic disease. Infants with strong family history of atopy	Modest evidence of benefits when used on infants at high risks of atopy. For use under medical supervision
HA/Hypo allergenic (Partially hydrolysed)	Cow's milk based. Proteins only partially processed and broken down	Infants with family history of atopy	Nil evidence indicating prevention of allergic disease
Amino acid-based (Elemental) formula	Built from component nutrients including individual amino acids	Infants with indications – malabsorption, colitis, multiple food protein allergies	Used under medical supervision for defined clinical indications where elemental diet is indicated
Lactose free	Cow's milk based. Lactose eliminated	Infants with lactose intolerance	Not recommended as choice nutrition for infants. Primary lactose intolerance rare. Short term use for transient lactose intolerance - gastroenteritis under medical supervision
Goats milk formula	Goats milk based	Infants at risks of atopy and cow's milk allergy	Nil evidence indicating efficacy, safety and role in prevention or treatment of allergic disease
Soy- based	Made from soy beans. No animal products or lactose. Higher amounts of aluminium and phytoestrogens	Infants at risks of atopy and cow's milk allergy. Cultural or religious reasons	Not effective in prevention of development of atopy and can worsen atopic illness. RACP recommends not using soy based infant formula for preterm infants, infants under 6 months and children with thyroid disease due to possible interaction with thyroxine replacement therapy Used under medical supervision for galactosaemia
Probiotics and Prebiotics	Bifid us factors	Promotion/ growth of good bacteria. Prevention of atopic disease	Insufficient evidence to recommend use