1. Overview

Waitemata DHB maternity facilities are accredited Baby Friendly Hospitals. Compliance with the World Health Organisation (WHO) International Code of Marketing of Breastmilk Substitutes (The WHO Code) and relevant, subsequent World Health Assembly resolutions is mandatory.

Waitemata DHB is committed to protecting, promoting and supporting breastfeeding. All maternity, neonatal and paediatric staff and Lead Maternity Carers (LMCs) are required to be familiar with, and utilise, the Waitemata DHB Breastfeeding Policy to ensure best practice.

All mothers have the right to make a fully informed decision as to how they feed their babies. The provision of clear and impartial information to all parents at an appropriate time is therefore essential. Feeding options should be discussed antenatally by the woman’s LMC. Staff will provide information regarding methods of feeding and will fully support mothers in their chosen method of infant feeding.

Purpose

To inform and educate about the safe and correct procedures to follow when a mother has chosen to feed her baby infant formula, or when it is medically indicated.

Scope

This policy is applicable to all Waitemata DHB staff, LMCs, visiting health professionals and students.

2. WHO Code Compliance

Waitemata DHB will adhere to the principals of The WHO Code;

- No employees of manufacturers or distributors of breastmilk substitutes, bottles, teats or dummies are permitted to have direct or indirect contact with pregnant women or postnatal mothers in Waitemata DHB facilities

- Employees of manufacturers and distributors of breastmilk substitutes (formula company reps) will only meet with relevant Dietician Team Leader who will in turn inform Maternity Managers, Paediatricians and Lactation Consultants, about changes to infant feeding products
Infant Formula

- Waitemata DHB employees will not accept free gifts, non-scientific literature, materials or equipment, money or support for education or events from manufacturers or distributors of breastmilk substitutes, bottles, teats or pacifiers.
- No advertising or promotion of breastmilk substitutes, feeding bottles, teats or dummies is permissible in any part of Waitemata DHB. Items such as calendars, posters, pens, etc. are prohibited if they display the manufacturers’ logos.
- Infant formula, fortifier, other breastmilk substitutes, bottles, and teats will not be stored in areas that are accessible or visible to pregnant women, mothers and visitors.
- Mothers and pregnant women and their families/whanau will not be given samples of products within the scope of the WHO Code.
- Waitemata DHB does not accept free infant formula or purchase at less than wholesale cost and adheres to the process of rotation of formula brands.
- No routine group instruction on the preparation or use of formula will be given in the antenatal or postnatal period.

3. Antenatal education

Women should be counseled antenatally about their choice of feeding, and breastfeeding recommended. Women who make a clearly informed choice to mix or formula feed should be supported in this decision. Women should be advised to select a dairy-based (cow’s milk) and age suitable whey-dominant formula, no brand should be specifically recommended. However staff may tell parents the brand of the RTF being currently used by the hospital if requested.

Women should be advised to bring with them into hospital their own formula and feeding equipment so that they can be given individual instruction on the safe preparation and feeding of their baby. Cold disinfection units are available although families may bring in their own systems e.g. microwave units.

4. Allergy concerns

Infants are defined as high risk of developing an allergy if at least one first-degree relative (parent or sibling) has documented allergic disease (atopic dermatitis, asthma, allergic rhinitis and food allergy).

There is some evidence that hydrolysed formulas may reduce the risk of allergic disease in high risk infants. Hydrolysed formula is a cow's milk based formula that has been processed to break down most of the proteins which cause symptoms in cow's milk allergic infants. Partially hydrolysed formulas, usually known as ‘HA’ or 'Hypoallergenic’ are the only infant formula recommended for allergy prevention.

⚠️ If a parent is requesting a non-dairy based formula, please refer for a paediatric consultation.

5. Ready to feed products (RTF)

Supplying of RTF

The New Zealand Ministry of Health (August 2004) states that Ready to Feed (RTF) formula must be supplied and used for premature (< 37 weeks gestation), low birth weight (< 2500g), sick babies and those in SCBU. Waitemata DHB supplies RTF for use for all babies.
Rotation of RTF products
In accordance with the BFHI documents RTF products are rotated. A rotation period of one year applies. Products will be reviewed annually in association with child health dietitians.

6. Bottles and teats

Teats and bottles (hospital supplied)
Individually wrapped sterile teats, and bulk purchased plastic bottles are recommended for single use only, however they can be placed in antibacterial solution at the bedside to allow for continued use for an individual mother and infant. On discharge they are discarded into a recycle container.

In SCBU, bottle fed babies will have their own bottle and teat for the length of stay. They are placed in antibacterial solution after each feed and kept at the bedside. Replacements are given as required. At discharge they will be discarded into a recycle container.

Teats are latex free and bottles and pink top storage containers are Bisphenol A free.

Specialised products
Specialised feeding systems are usually prescribed after assessment by a Speech Language Therapist with lactation consultant input. They are individually issued and are not disposable.

7. Parental education and advice
Parents should receive the following individual information and education:
1. The importance of skin-to-skin care
2. The importance of rooming in
3. Recognising feeding cues and cue based feeding
4. Recognising when baby is feeding effectively
5. Safe feeding techniques
6. Instruction on preparing powdered infant formula (PIF)
7. Instruction on cleaning and sterilizing equipment
8. Parents should also receive “Feeding your baby infant formula” Health Ed Resource HE 1306

8. Safe bottle feeding technique
Assist with positioning the baby in a well-supported slightly more upright position:
- Watch for feeding cues, touch top lip with teat to elicit gap then place teat in mouth
- Hold the bottle at such an angle as to allow the formula to fill the teat
- When tipped newborn teats should drip formula at 1 drop per second
- Hold baby during feeds, do not leave baby unattended or prop bottle in baby’s mouth
- Pace feed and allow time for winding
- Switch baby from side to side during the feed
- Baby does not need to take all the feed at every feed, some variance is normal as long as baby’s overall growth and development is tracking within normal limits

9. Preparing Ready to Feed (RTF) formula
This applies to the RTF supplied for hospital use only, in a sterile glass bottle. Store at room temperature
10. Preparing Powdered Infant Formula (PIF)

PIF is not sterile and may contain bacteria. Illness from contaminated PIF is rare, however attention to the correct procedure for making, using and storing PIF is essential to minimise risk.

Storage and expiry dates on tins
- There is an expiry date on the bottom of the PIF tin which applies until the seal is broken.
- Once the seal is broken write the expiry date on the lid. The PIF must be used within 4 weeks.
- Store in a clean, dry place with the lid kept on tight.

Method
- Read and follow instructions on the tin of PIF.
- The concentration is always as per directions on the tin; never alter this as it can be harmful to the baby.
- Prepare each feed as close as possible to feeding time.
- **Wash and dry hands thoroughly before preparing bottle feeds.** The working environment must be clean and equipment sterilised.
- Boil fresh water (see section on ‘Water’ below).
- Pour the correct amount of cooled boiled water into the sterilised bottle before adding the powder to ensure correct nutritional value. Not all bottles have correct volume lines on them. Look for the standard mark EN14350.
- Use the scoop and instructions provided with each tin to measure the formula powder. Level the scoop, most tins have a lip inside the tin for this, or use the back of a clean knife, do not pack powder into the scoop.
- Add the correct number of full, level scoops of power to the measured water.
- Attach lid and swirl the bottle gently until the formula is mixed thoroughly.
- Feed as soon as possible to prevent the growth or harmful bacteria.

Water
- For at least the first 3 months, all water (including purchased water) used to make up PIF should be boiled on the day it is used. If you are concerned about water quality, continue to boil and cool water until your baby is six months old.
- Boil water for 3 minutes on the stove top or until an automatic kettle switches itself off.
- Keep boiled water covered while it cools, it can be stored in baby bottles in the fridge. Keep for only 24 hours then discard.
- Water from tanks or bore holes should still be boiled until the baby is 18 months old.
Storing feeds
Ideally store the cooled boiled water and then mix with the PIF when needed.
- If formula must be prepared in advance store in the back of the fridge (2-4°C check fridge temperature) for no more than 4 hours
- Keep the feed cold in a chilly bin or insulated carrier and discarded when it has been out of the fridge for more than 2 hours

Warming the prepared feed
- Place the prepared bottle in a container of hot tap water. Take care not to use boiled water due to risk of scalding if spilled – water from a hot tap is adequate
- Once warmed, finish feeding your baby within 2 hours. Throw away any unused formula. Never reheat warmed or party used feeds
- Always check the temperature of the formula by shaking the bottle and dripping some of the formula on the inside of your wrists. If it feels warm on the wrist is safe for your baby. Formula that is too hot or unevenly heated can cause serious burns to the baby’s mouth and throat
- Microwaves can overheat or heat unevenly and are not recommended. However, if parents choose this method at home they should shake the prepared bottle thoroughly and leave to stand to 2-3mins- shake it again and test on wrist. Use the warmed feed within 20 minutes
- Discard any remaining feed
- Some babies are quite happy being fed prepared PIF at room or fridge temperature

11. Safe cleaning and sterilising of equipment

Cleaning equipment prior to sterilising
- Wash hands
- Rinse bottles, tops and teats then wash in warm soapy water. Use a bottle brush on the inside of the bottles and teats
- Rinse thoroughly and force water through holes in teat

Boiling method
- Use a pot large enough to allow all equipment to be submerged in the water
- Bring to the boil and boil for 1 minute
- Once cooled, use straight away or put teat and top together and store in a clean, dry area until needed
- Do not wipe bottles, tops or teats as this can re-introduce bacteria

Cold disinfection method - follow manufactures instructions
- Use a plastic container large enough to submerge all the equipment
- Use an appropriate antibacterial solution/tablets
- Read manufacturer instructions for the solution or tablets being used
- Drain and shake off excess fluid then put bottles, tops and teats together. Do not rinse solution off
- Use straight away or store in a clean, dry area until needed
- Do not wipe bottles, tops or teats with anything as this can re-introduce bacteria

Other methods e.g. microwave steriliser
Parent/caregivers should be encouraged to follow the instructions as provided by the manufacturer.
12. Specialised formula decision tool

This flowchart is for use in hospital when exclusive breastfeeding is not possible and there is a family member, either a sibling or parent, with a history of allergic disease.

- **No family history in either siblings or parents of allergic disease (this includes atopic dermatitis, asthma, allergic rhinitis and food allergy)**
  - Use Starter infant formula Ready to Feed (RTF)
  - **Tolerates**
    - Continue with chosen infant formula
  - **Does not tolerate**
    - Discuss with dietitian/ paediatrician and consider use of an extensively hydrolysed or amino acid formula (Pepti-Junior or Neocate)

- **Infant has either a sibling or parent with a history of allergic disease (this includes atopic dermatitis, asthma, allergic rhinitis and food allergy)**
  - Use Hypoallergenic (HA) infant formula (contact your dietitian)
  - **Pre-term/ low birth weight (LBW) infant:**
    - use Pre-term HA, RTF formula
  - **Term infant:** use term HA
  - **Tolerates**
    - Continue with chosen infant formula
  - **Does not tolerate**
    - Discuss with dietitian/ paediatrician and consider use of an extensively hydrolysed or amino acid formula (Pepti-Junior or Neocate)

On discharge infants can be changed from RTF infant formula to powdered infant formula, which is available in both starter and hypoallergenic infant formula.
## 13. References

<table>
<thead>
<tr>
<th>Type</th>
<th>Title/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document</td>
<td>The World Health Organisations International Code of Marketing of Breast Milk</td>
</tr>
<tr>
<td></td>
<td>Substitutes (WHO 1981)</td>
</tr>
<tr>
<td>Document</td>
<td>Implementing and Monitoring the International Code of Marketing of Breast-milk</td>
</tr>
<tr>
<td></td>
<td>substitutes in New Zealand: The Code In New Zealand MOH 2007</td>
</tr>
<tr>
<td>Document</td>
<td>Inquiry into Actions of Sector Agencies in Relation to Contamination of Infant</td>
</tr>
<tr>
<td></td>
<td>Formula with Enterobacter Sakazakii Dr P G Tuohy Chief Advisor Child and Youth</td>
</tr>
<tr>
<td></td>
<td>Health and Dr M Jacobs Director of Public Health, Ministry of Health, March 2005</td>
</tr>
<tr>
<td></td>
<td>Accessed August 2016</td>
</tr>
<tr>
<td>Document</td>
<td>Food and Nutrition Guidelines for Healthy Infants and Toddlers (Aged 0-2) A</td>
</tr>
<tr>
<td></td>
<td>for Healthy Infants and Toddlers (Aged 0–2): A background paper - Partially</td>
</tr>
<tr>
<td></td>
<td>revised December 2012. Wellington: Ministry of Health</td>
</tr>
<tr>
<td>Pamphlet</td>
<td>Feeding Your Baby Infant Formula (MOH) HE1306 June 2017</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.healthed.govt.nz/resource/feeding-your-baby-infant-formula">Link</a></td>
</tr>
<tr>
<td></td>
<td>Eating for Healthy Babies and Toddlers/Te Kai Totika mo te Hunga Kohungahunga (MOH)</td>
</tr>
<tr>
<td></td>
<td>Revised April 2013. 04/2013. Code HE1521 <a href="https://www.healthed.govt.nz/resource/eating-healthy-babies-and-toddlersng%C4%81-kai-t%C5%8Dtka-m%C5%8D-te-hunga-k%C5%8Dhungahunga">Link</a></td>
</tr>
<tr>
<td>WDHB policies and guidelines</td>
<td>Infection Control Policies: <a href="http://staffnet/QualityDocs/Quality%20Documentation/O5%20Infection%20Control/1%20General/%5BP%5D%20Hand%20Hygiene%20Dec15.pdf">Link</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://staffnet/QualityDocs/Quality%20Documentation/O5%20Infection%20Control/1%20General/%5BP%5D%20Cleaning%20%20Disinfection%20Oct16.pdf">Link</a></td>
</tr>
<tr>
<td></td>
<td><a href="http://staffnet/QualityDocs/Quality%20Documentation/O5%20Infection%20Control/1%20General/%5BP%5D%20Medical%20Devices%20-%20Single%20Use%20Items%20Dec13.pdf">Link</a></td>
</tr>
<tr>
<td>NZBA</td>
<td>Baby Friendly Documents for Aotearoa New Zealand 2017 (accessed February 2018)</td>
</tr>
<tr>
<td>COMAG Agencies Ltd</td>
<td>Letter dated 19th February 2016 regarding hospital supplied bottles</td>
</tr>
<tr>
<td>Research</td>
<td>Greer FR, et al. Effects of Early Nutritional Interventions on the Development of</td>
</tr>
<tr>
<td></td>
<td>Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction,</td>
</tr>
<tr>
<td></td>
<td>Breastfeeding, Timing of Introduction of Complementary Foods and Hydrolyzed</td>
</tr>
<tr>
<td></td>
<td>Formulas. Paediatrics 2008; 121:183-91</td>
</tr>
<tr>
<td></td>
<td>Sicherer SH, Burks AW. Maternal and infant diets for prevention of allergic</td>
</tr>
</tbody>
</table>