

Expressed Breastmilk and Infant Formula

Food Foundations • an NAQ Nutrition program

Transporting Expressed Breast Milk (EBM) and Infant Formula (IF)

- It is best practice for parents to send in pre-measured powdered infant formula in one container and cooled boiled water in a bottle for educators to make up when required
- EBM and prepared infant formula must be transported in an insulated container with an ice brick
- EBM should be transported in bottles or specialised EBM storage bags

Preparing Expressed Breast Milk (EBM) and Infant Formula (IF)

Unlike most other foods, infant formula (IF) and expressed breast milk (EBM) should be warmed to body temperature only. Heating IF and EBM to high temperatures destroys some nutrients. Good hygiene and safe food handling techniques are therefore very important for these products.

Provide parents with clear written guidelines and recommendations regarding the safe food handling of IF and EBM. This must include:

- Safe preparation and storage of IF and EBM
- The number and types of bottles/bags of milk to be provided each day
- The importance of labelling and dating each product
- Safe transportation of EBM and IF
- Where and when it should be placed in the refrigerator/freezer
- How bottles and equipment should be cleaned

To warm EBM or IF, stand the bottle in a container of warm (not boiling) water until the contents reach body temperature (37°C). This process should take no longer than 10-15 minutes (an electric bottle warmer could also be used). Test the milk temperature on clean, unbroken skin (usually your wrist). Once warmed to the correct temperature, offer the bottle to the infant immediately – do not keep the bottle at room temperature for extended periods of time.

If the EBM needs to be defrosted it should be removed from the freezer and stored in the

coldest part of the refrigerator. Avoid placing EBM or IF in the door at any time as temperatures will regularly reach over 5°C in this location. Never refreeze defrosted EBM. This also means that frozen EBM which has **partially defrosted** on arrival to the service should be placed in the refrigerator and not the freezer. The temperature of refrigerators containing







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EBM/IF should be regularly monitored to ensure they are running at less than 5°C. Microwaving EBM or IF can create "hot spots" in the bottle which may destroy nutrients and burn the baby's mouth – even if the temperature appears OK on testing.

Microwaving is not recommended.

If frozen EBM is urgently required place the bottle in a jug or saucepan of warm water and replace the water as it becomes cold. **Do not use very hot water as this will destroy nutrients and anti-microbial factors**. Use warm running water for bags of EBM. Once the frozen EBM is defrosted it can be warmed to body temperature using the correct procedure previously described.

Only warm enough EBM/ IF for a single feed into a clean, empty bottle each time. It is preferable that parents bring several bottles/supplies with small volumes of EBM rather than a few larger bottles as decanting introduces another potential opportunity for contamination by food poisoning bacteria.

Should Expressed Breast Milk (EBM) be brought to the service in bottles or bags and should containers be sterilised?



Authorities vary in terms of recommendations for sterilised vs. clean containers and bags vs bottles. However, as EBM brought in to the service undergoes extra steps, such as additional handling and exposure to room temperature during transportation, it is wise to recommend the mother expresses straight into a sterilised bottle and transport the EBM in an insulated container with an ice brick. If bags must be used, those specialised for EBM have the advantage of being thicker with less risk of tearing and more protection against heat, which will destroy important nutrients. Specialised bags also guarantee that plasticisers / Bisphenol A will not migrate into the milk with heating or freezing.

What if an Infant Refuses a Feed?

EBM/IF should always be discarded at the completion of a feed – even if the infant consumes only a small amount of milk. This is necessary as bacteria from the baby's mouth will contaminate the feed and time spent at room temperature allows food poisoning bacteria to multiply.

If an infant is prone to feed refusal, offer smaller volumes than you expect the infant to drink to avoid wasting precious EBM or limited supplies – you can always offer more if they are still hungry. Look for signs that the infant is really hungry before offering a feed. Note that breastfed infants may need to feed more frequently and take smaller volumes than formula fed babies due to breast milk being digested more quickly than formula.





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It is strongly advised to request that the parent/carer bring in extra, small volumes of EBM/IF if at all possible, so you have a back-up should the infant refuse a feed or an accident, such as spilling milk, occurs. You need to decide on, and document a safe "plan of action" with the parent regarding how they wish to manage a shortage of EBM/IF.

Enjoyable Feeding

For both you and baby to enjoy bottle feeding ensure the following:

- You and baby are both comfortable
- The milk is at the correct temperature
- Relax, hold baby close and avoid interruptions

