Handling and Storage of Breast Milk and Prepared Formula

Milk is susceptible to bacterial contamination, if it is not handled and stored properly.

Breast milk and prepared formula must be refrigerated at 40 °F or below. Use an appliance thermometer to be sure your refrigerator is cold enough.

Cleaning Bottles

- Sterilizing bottles in boiling water before first use is recommended. After that, bottles can usually be safely washed and dried in a properly functioning dishwasher.

- Before preparing a bottle, wash your hands, arms, and under your nails with soap and water for at least 20 seconds. Rinse thoroughly and dry hands with a clean cloth or single use paper towel.

- Clean and sanitize the kitchen sink by the method described above in Cleaning and Sanitizing Surfaces and Toys.

- Wash bottles and nipples, caps, rings, and preparation utensils in hot water and soap before using. Use sink stopper to hold hot water in the sink. Add dish washing liquid as you fill the sink with hot water.

- Add some hot soapy water into bottles. Put bottle brush into the bottle. Rotate the brush inside the bottle until the bottle is clean. Wash away the soapy water under running water.

- Use nipple brush to wash nipples, including nipple holes.

- Squeeze the hot, soapy water through nipple hole to flush out any trapped milk.

- Rinse all utensils under running water to wash away all traces of soapy water.

- Use sanitized tongs to remove bottles, nipples and other utensils. Place them in the dish drainer to dry.
Preparing Bottles of Formula

- Before opening a can of formula, clean the formula container lid and can opener with soap and water and rinse well. This will minimize the possibility of contamination.
- Unopened containers of powdered formula should not be washed as this might inadvertently introduce moisture into the powder.
- Never add new formula to a half-filled bottle of formula.
- To prepare powdered formula, pour the desired amount of water in a clean baby bottle. Using scoop provided, measure dry formula into baby bottle.
- Attach nipple and ring to the bottle and SHAKE WELL.
- Feed prepared formula immediately or store it, covered in the refrigerator for up to 24 hours. Label the can of formula with the date and time of opening so you will know it is used within 24 hours.
- If more than one bottle is prepared, put a clean nipple right side up on each bottle and cover with a nipple cap. Label each bottle with the date and time that it was prepared.
- Do not leave formula at room temperature. Never use formula that is past the expiration date on the package.
- For infants who prefer a warmed bottle, warm the bottle immediately before serving by holding the bottle under running warm tap water or by placing the bottle in a bowl of warm water for not more than 15 minutes.
- Shake the bottle before testing the temperature. Sprinkle some formula on the inside of your wrist to make sure it is comfortably warm (body temperature), but not too hot.
- Never use a microwave oven to warm infant formula.
- Throw out any formula or breast milk that is leftover in the bottle after the feeding.
- Infant formula that is removed from refrigeration must be used within 2 hours or discarded.

Storing Prepared Formula

- Opened cans of concentrated or ready-to-feed liquid infant formula must be covered, refrigerated, and used within 48 hours.
- Freezing infant formula is not recommended.
- Powdered infant formula must be tightly covered and stored in a cool, dry place and used within 1 month.
Breast Milk

Breast milk and prepared formula must be refrigerated at 40 °F or below. Use an appliance thermometer to be sure your refrigerator is cold enough.

- Disposable bottle liners or other plastic bags not intended for breast milk storage should never be used to store breast milk.
- Pumped breast milk should be stored in clean glass or hard BPA-free plastic bottles with tight-fitting lids. Mothers can also use milk storage bags which are made specifically for freezing human milk.
- When freezing, put the date on breast milk. Thaw and use the frozen breast milk in date order.
- Use thawed breast milk within 24 hours. Do not re-freeze thawed breast milk.
- Breast milk should be labeled with the date it was pumped. Pumped breast milk does not necessarily need to be warmed before giving it to the baby.
- Never put a bottle or bag of breast milk in the microwave.

Table 1. Guide to storing fresh breast milk

<table>
<thead>
<tr>
<th>Place</th>
<th>Temperature</th>
<th>How long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counter top, table</td>
<td>Room temp (60 °F - 85 °F)</td>
<td>No more than 3-4 hours</td>
</tr>
<tr>
<td>Small cooler with a blue ice pack</td>
<td>50 °F</td>
<td>24 hours</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>40 °F or colder</td>
<td>No more than 48 hours</td>
</tr>
<tr>
<td>Freezer</td>
<td>0 °F or colder</td>
<td>No more than 6 months</td>
</tr>
</tbody>
</table>

Table 2. Guide to storing thawed breast milk

<table>
<thead>
<tr>
<th></th>
<th>Room temperature (60 °F to 85 °F)</th>
<th>Refrigerator (40 °F or colder)</th>
<th>Freezers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thawed breast milk</td>
<td>No more than 1-2 hours</td>
<td>24 hours</td>
<td>Do not re-freeze</td>
</tr>
</tbody>
</table>