

# Proper handling and storage of human milk

By following safe preparation and storage techniques, nursing mothers and caretakers of breastfed infants and children can maintain the high quality of expressed breast milk and the health of the baby.

### Safely preparing and storing expressed breast milk:

- Be sure to wash your hands before expressing or handling breast milk.
- When collecting milk, be sure to store it in clean containers, such as screw cap bottles, hard plastic cups with tight caps or heavy-duty bags that fit directly into nursery bottles. Avoid using ordinary plastic storage bags or formula bottle bags because these could leak or spill.
- If delivering breast milk to a child care provider, clearly label the container with the child's name and date.
- Clearly label the milk with the date it was expressed to facilitate using the oldest milk first.
- Do not add fresh milk to already frozen milk within a storage container. It's best not to mix the two.
- Do not save milk from a used bottle for another feeding.

#### Safely thawing breast milk:

- As time permits, thaw frozen breast milk by transferring it to the refrigerator for thawing or by swirling it in a bowl of warm water.
- Avoid using a microwave oven to thaw or heat bottles of breast milk.
  - Microwave ovens do not heat liquids evenly. Uneven heating could easily scald a baby or damage the milk.
  - Bottles may explode if left in the microwave too long.
  - Excess heat can destroy the nutrients of the expressed milk.
- Don't re-freeze breast milk once it has been thawed.



# Storage duration of fresh human milk for use with healthy, full-term infants

Location	Temperature	Duration	Comments
Countertop, table	Room temperature (up to 77°F or 25°C)	6 to 8 hours	Containers should be covered and kept as cool as possible. Covering the container with a cool towel may keep milk cooler.
Insulated cooler bag	5 to 39°F or -15 to 4°C	24 hours	Keep ice packs in contact with milk containers at all times, limit opening cooler bag.
Refrigerator	39°F or 4°C	5 days	Store milk in the back of the main body of the refrigerator
Freezer compartment of a refrigerator	5°F or -15°C	2 weeks	Store milk toward back of the freezer, where temperature is most constant.
Freezer compartment of refrigerator with separate doors	0°F or -18°C	3 to 6 months	Milk stored for longer durations in the ranges listed is safe, but some of the fat in the milk may undergo changes that may lower the quality or change the taste of the
Chest or upright deep freezer	-4°F or -20°C	6 to 12 months	milk.

#### References:

- Academy of Breastfeeding Medicine. (2004) Clinical Protocol Number #8: Human Milk Storage Information for Home Use for Healthy Full Term Infants. Princeton Junction, New Jersey: Academy of Breastfeeding Medicine.
- Centers for Disease Control and Prevention, 2017



### Storage duration of fresh human milk for use

## with premature or hospitalized infants

Location	Temperature	Duration	Comments
Countertop, table	Room temperature (up to 77°F or 25°C)	AVOID	It is safest to refrigerate right away. NOTE: Bringing milk that is refrigerated and cooled is safer than bringing frozen milk to the hospital.
Insulated cooler bag	5 to 39°F or -15 to 4°C	24 hours	Keep ice packs in contact with milk containers at all times, limit opening cooler bag. This method is recommended for transporting milk to the hospital.
Refrigerator	39°F or 4°C	Up to 48 hours	Store milk in the back of the main body of the refrigerator.
Freezer compartment of a refrigerator	5°F or -15°C	2 weeks	Store milk toward back of the freezer, where temperature is most constant.
Freezer compartment of refrigerator with separate doors	0°F or -18°C	2 to 3 months	Milk stored for longer durations in the ranges listed is safe, but some of the fat in the milk may undergo changes that may lower the quality or change the taste of the milk.
Chest or upright deep freezer	-4°F or -20°C	Less than 3 months is optimal.	

#### References:

- Academy of Breastfeeding Medicine. (2004) Clinical Protocol Number #8: Human Milk Storage Information for Home Use for Healthy Full Term Infants. Princeton Junction, New Jersey: Academy of Breastfeeding Medicine.
- Centers for Disease Control and Prevention, 2017

#### Sources:

- American Academy of Pediatrics.
- U.S. Centers for Disease Control and Prevention (CDC): www.cdc.gov.