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#### Storing and Handling Mother's Milk

Your milk is important for your baby's nutrition and health. By expressing milk, you can continue to give these precious gifts to your baby.

# What types of clean containers can I use to store the breast milk I express?

Here are some different types.

- Glass with a leak-proof lid
- Hard, BPA-free plastic with a leak-proof lid
- Breast milk freezer bags
- Do not use thin disposable feeding bottle liners or sandwich bags. They can split when frozen.

### How much expressed breast milk should I store in a container?

Store in the smallest amount your baby might take. It is better to warm up more milk than to have to throw away any leftover milk in the bottle. Here are some general guidelines:

- For babies 1-2 weeks old, 2-3 oz. (60-90 mL) per feeding
- For babies 1-6 months, 3-5 oz. (90-150 mL) per feeding
- If freezing your milk, always leave room for expansion.
- Just like any liquid you freeze, milk expands too, so do not fill up to the very top of the container.

## The milk I stored is separated into two layers. Is that normal?

Yes, it is normal for your stored milk to separate into a cream layer on top and a more watery layer, on the bottom. Before giving to your baby, blend the two layers together by gently moving the storage container around. Do not shake.

## Can I add freshly expressed milk to stored frozen milk?

Cool the fresh milk in the refrigerator before adding to already refrigerated or frozen milk. Use the date of the oldest expressed milk to determine the expiration date. Milk storage guidelines are on the back side of this page.

### Do I need to label the containers that I store my milk in?

Yes, label with the date and time using a sticky label or non-toxic marker. If your baby is at a facility that cares for other babies or toddlers, make sure to include your baby's name on the label.

#### How do I thaw my frozen milk?

- Place it in the refrigerator the night before you plan to use it. Use this milk within 24 hours of thawing.
- Heat it up in a cup of warm water right before you plan to give it to your baby.
- Never use hot or boiling water to warm up your milk Doing so can make the milk too hot and burn your baby's mouth and throat.
- Never microwave your milk. Doing so can cause hot spots in the milk that can burn your baby's mouth and throat.

### How long can I store my expressed breast milk?

That depends on where you store it. The milk storage guidelines on this handout are for healthy babies who are at home. If your baby is in the hospital (preterm or sick), check with your baby's healthcare provider to find out what milk storage guide- lines they recommend.

#### A few additional tips are:

- Freshly expressed milk is best. If you have stored milk at room temperature, give that first if you are going to be apart from your baby.
- If you plan to use your milk within 8 days, store it in the refrigerator. Otherwise, store it in the coldest part of the freezer.
- Never store your milk in the door of the refrigerator or freezer. It is more likely to defrost.
- Freshly pumped milk can be stored in a cooler with frozen ice packs (59 °F/15 °C) for up to 24 hours.
- If you follow the time frames in the storage guidelines table, you can keep your milk at room temperature, then refrigerate it, and then freeze it.
- The longer your milk is stored, the more vitamins and antioxidants are lost. But stored breast milk still has more health benefits than formula, so continue to pump and store your milk for your baby.

This is general information and does not replace the advice your healthcare provider. If you have a problem you cannot solve quickly, seek help right away. Every baby is different. If in doubt, contact your physician or other healthcare provider.

#### References

Jones F. Best Practice for Expressing, Storing and Handling Human Milk. Grd ed. Fort Worth, TX: HMBANA, Inc; 2011.
Mohrbacher N. Breastfeeding Answers Made Simple: A Guide for Helping Mothers. Amarillo, TX: Hale Publishing, LP; 2010.
Spangler A. Breastfeeding: A Parent's Guide, 9th ed. Cincinnati, OH: Speciality Lithographing Co; 2010.

#### Storage Time for Human Milk\*

#### My thawed milk has a soapy odor. Is it spoiled?

Spoiled milk will smell spoiled. If it has a soapy odor, it is not spoiled. Some mothers make milk high in lipase, an enzyme that digests fat. When thawed, the frozen milk of these moms has a strong, soapy smell. This milk is safe for your baby to take but sometimes your baby will refuse this milk. If this happens and your baby refuses this milk, deactivate the lipase by scalding the milk first before freezing it. To scald your milk, heat it in a pot on the range just until bubbles form at the edges, then cool and freeze it.

#### Do I need to warm up my baby's milk?

If you have a newborn baby that needs milk given in a bottle, warm the milk up by placing in a cup of warm water. Test it to make sure it is not too hot before giving it to your baby. If your baby is a few months old, you can give chilled milk right out of the refrigerator. Some babies still prefer warm milk, so if your baby does, follow the guidelines above for warming it up.

### The milk I stored is separated into two layers. Is that normal?

Yes, it is normal for your stored milk to separate into a cream layer on top and a more watery layer, on the bottom. Before giving to your baby, blend the two layers together by gently moving the storage container around. Do not shake.

	Store at Room Temp.	Store in Refrigerator	Refreeze
Freshly Expressed	less than 6 hours	less than 4 days	3-6 months (deep freeze in -20 ° for up to 12 months)
Previously Frozen Thawed in refrigerator but not warmed	less than 4 hours	less than 24 hours	Do not refreeze.
Previously Frozen Brought to room temperature	Up to an hour and then discard	less than 4 hours	Do not refreeze.
Previously Frozen Thawed pasteurized donor human milk	less than 4 hours	less than 48 hours	Do not refreeze.
Frozen Pasteurized donor human milk in a deep freeze	-	-	9-12 months
Infant has started feeding	For the completion of the feed and then less than 4 hours	less than 4 hours	Do no refreeze.