

UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources



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Food Safety Tips for Infant Feeding

The purpose of this publication is to provide caregivers with food safety information for feeding infants, including making baby food as well as preparing and storing breast milk and baby formula.

MAKING BABY FOOD

- 1. **Clean:** Wash hands with warm water and soap for at least 20 seconds before and after handling food. Wash cutting boards, utensils, and counter tops with hot, soapy water after preparing each food item and before you go on to the next food.
- 2. **Separate:** Don't cross contaminate. Keep raw meat and poultry apart from foods that won't be cooked.
- 3. **Cook:** Use an instant-read thermometer to ensure food is cooked to 165°F.
- 4. **Chill:** Chill immediately in single-serve portions. Keep in refrigerator at less than 40°F. Ice cube trays can be used to freeze smaller portions of baby food. Once frozen, remove the cubes of food from the trays, and store in a freezer-safe container at 0°F. Single-serve portions are important to avoid introducing bacteria or viruses during feedings into the food. Throw away any leftovers from each single-serve portion after using.
- 5. **Defrosting:** Never defrost baby food on the counter. Frozen portions can be placed in the refrigerator to defrost 1 or 2 days in advance. Alternatively, the food can be defrosted in the microwave or in a sealed container in cold water (changing the water every 30 minutes). Always be sure to reheat food to 165°F, then let cool before serving, and check for hot spots in food that has been heated in a microwave.

SAFETY TIPS FOR EXPRESSED BREAST MILK AND INFANT FORMULA

- 1. Clean:
 - Wash hands with warm water and soap for at least 20 seconds before and after expressing breast milk or making infant formula.
 - Wash breast pump parts according to manufacturer's directions. Be sure to clean bottles completely by separating parts, washing in warm, soapy water, rinsing well, and air drying. Cleaning bottles and parts in the dishwasher on the sanitizing setting may kill more bacteria and viruses.
 - Keep powdered formula lids and scoops clean and close containers of infant formula and bottled water as soon as possible.
- 2. **Separate:** Don't cross contaminate. Be sure to use clean utensils, measuring cups, and bottles. Store away from meats, chemicals, and other household hazardous materials.
- 3. Cook:
 - Do not prepare infant formula more than 24 hours in advance.
 - Boil water prior to mixing powdered infant formula. Check water on the inside of your wrist to ensure it is not too hot, and then mix according to manufacturer's directions.
 - Be sure to keep all pre-prepared infant formula refrigerated at 40°F or below.

Remember the four aspects of food safety: clean, separate, cook, and chill. These food-safe behaviors are important components of ensuring infant health and wellness.

4. Chill:

- Follow the storage guidelines below. Use appliance thermometers to ensure the refrigerator is less than 40°F and the freezer is 0°F.
- Refrigerate freshly expressed breast milk or premixed infant formula as soon as possible (less than 40°F).
- Breast milk may also be frozen (0°F).
- 5. Storage:

Freshly expressed breast milk can be left at room temperature (50° to 85°F) for up to 4 hours if it is not feasible to chill sooner.

- Store breast milk or premixed infant formula in the coldest place in the refrigerator, generally in the back and above meats.
- Breast milk stored in the refrigerator should be used or frozen within 4 days.
- To freeze breast milk, place away from the freezer walls to prevent storage bags from sticking.
- Breast milk stored in the freezer is optimal when used within 6 months but can be used up to 12 months.
- Chill the freshly expressed breast milk before adding to cool or frozen breast milk. This prevents the newly added breast milk from rewarming the previously cooled breast milk.
- Premixed infant formula can be left at room temperature for up to 2 hours.
- Premixed infant formula can be stored in the refrigerator for up to 24 hours.
- Do not freeze infant formula.

THAWING FROZEN BREAST MILK

- Frozen breast milk can be thawed in the refrigerator overnight and should be used within 24 hours.
- Another option is to thaw breast milk with warm water, either by placing the storage bag in a container of warm water or beneath running warm water. Breast milk defrosted using this method must be used immediately. Discard any leftover portions within 2 hours.

- A bottle warmer may also be used. Follow manufacturer's instructions.
- After feeding, previously frozen breast milk can still be used. Leftover breast milk should be discarded 2 hours after initial feeding. Infant formula that has been warmed should be thrown away after 1 hour.
- Do not refreeze breast milk after thawing.

REFERENCES

- Academy of Breastfeeding Medicine (ABM). 2017. Clinical Protocol #8. ABM website, https://abm.memberclicks.net/assets/ DOCUMENTS/PROTOCOLS/8-humanmilk-storage-protocol-english.pdf.
- Centers for Disease Control and Prevention (CDC). 2018. Cronobacter: Prevention and control. CDC website, cdc.gov/ cronobacter/prevention.html.
- Partnership for Food Safety Education. Fight Bac! website, http://www.fightbac. org/free-resources/logos-and-graphics/ be-food-safe-graphics/.

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