



Safe Food for Babies: **Handling Breast Milk, Formula and Baby Food**

About 76 million Americans get sick from contaminated food or beverages each year. Infants and young children are most at risk for foodborne illness because their immune systems are not fully developed. Also, the stomachs of infants and young children produce less acid, making it easier for harmful microorganisms to invade their bodies. Follow these tips to keep breast milk, formula and baby food safe for babies.

Keep it Clean!

- Wash your hands! To prevent the spread of harmful bacteria from your hands to the baby's mouth, wash your hands in warm, soapy water for at least 20 seconds.
- Clean bottles and nipples after every use. Use dish soap and hot water to wash and rinse all utensils used to prepare and serve food (including the can opener).
- To sterilize bottles and accessories, place in boiling water for 10 minutes. Remove with tongs and allow to air dry completely for one hour before using. Many bottles are dishwasher-safe and will be sterilized after being washed by this method.
- Wash eating areas with hot, soapy water.



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North Dakota State University
Fargo, North Dakota 58105

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Handle it Safely!

Breast Milk

- Collect expressed breast milk in sterilized 4-ounce plastic bottles and plastic bottle liners and immediately store in the refrigerator.
- Milk that won't be used within 24 to 48 hours should be frozen immediately in sterilized, 4-ounce plastic or glass bottles or sealable plastic bags. Label with the date and use older milk first. Frozen breast milk can be stored for three to four months.
- Thaw breast milk in warm water only. To distribute the fat, shake the container of milk before serving.
- Do not refreeze breast milk.
- Unused portions of breast milk left in the bottle after feeding should be discarded.
- Avoid leaving a bottle with a baby during naptime as the milk may become unsafe to drink over time and can lead to future tooth decay.

Timing is Important!

- Never use milk, formula or food that has been left out at room temperature without a cold pack for two hours or longer.
- When traveling, keep bottles and food in an insulated cooler with ice or cold packs. During warm weather, place the cooler inside the car instead of in the trunk.

Handle it Safely!

Formula

- Fill sterilized bottles with just enough formula for one feeding. Bottles can be sterilized in boiling water for 10 minutes or in the dishwasher. Throw away leftovers. Harmful bacteria from the baby's mouth may have entered the bottle during feeding and could grow to unsafe levels.
- Tightly cover and place cans of liquid formula directly in the refrigerator after filling the bottle. Open cans of liquid ready-to-use formula will remain safe for up to 48 hours. Prepared infant formula should be used within 24 hours.
- Follow the manufacturers recommendations for preparing bottles before filling with any kind of formula, powder or liquid. Observe the "use by" and "expiration" dates on formula cans. Vitamin levels and food quality deteriorate after the expiration date.
- Avoid leaving a bottle with a baby during naptime as the milk may become unsafe to drink over time and can lead to future tooth decay.

Safe Food Storage Guide

Liquids

	Storage Time	
	Refrigerator at 40 F or below	Freezer at 0 F or below
Expressed breast milk	5 days	3 months
Powdered formula mixed with water	1 day	Not recommended
Formula in an opened can	2 days	Not recommended
Whole milk*	5 days	3 months

* Whole milk is recommended for toddlers ages 1 to 2.

Solids

	Storage Time	
	Refrigerator at 40 F or below	Freezer at 0 F or below
Strained fruits and vegetables	2-3 days	6-8 months
Strained meats and eggs	1 day	1-2 months
Meat/vegetable combinations	1-2 days	1-2 months
Homemade baby foods	1-2 days	3-4 months



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Baby Food

- Check the “circle of safety” button in the center of baby food jars at the store. A “down” button means the jar is sealed and safe to use. Avoid buying damaged jars with chipped glass, rusty lids or dirty labels.
- Spoon out the desired amount of baby food from the jar into a separate feeding dish and immediately place the remainder in the refrigerator. Do not feed an infant directly from the jar because saliva on the spoon may contaminate the remaining food.
- If making homemade baby food, use a brush to thoroughly clean areas around blender blades or food processor parts. Harmful bacteria may lurk in these areas. “Home Canning of Fruit and Fruit Products” (HE-174), an NDSU Extension Service publication, has more information on home canning baby food. It’s available at www.ag.ndsu.nodak.edu/food.htm
- Do not feed honey to a child 1 year old or younger. Honey can contain “spores” (seedlike forms of bacteria) that could cause botulism in young children. Botulism can cause serious illness or death.
- Freeze homemade baby food by putting the mixture in an ice cube tray and covering with plastic wrap until frozen. Transfer food cubes into a freezer bag or airtight container and label with contents and date.

North Dakota Resources

North Dakota Division of Nutrition and Physical Activity

www.ndhealth.gov/NutrPhyAct/

North Dakota WIC Program

www.health.state.nd.us/wic/

NDSU Extension Service Healthy Pregnancy

www.ag.ndsu.edu/health/pregnancy/pregnancy.htm

NDSU Extension Service Kids & Nutrition

www.ext.nodak.edu/food/kidsnutrition/

National Resources

U.S. Department of Health and Human Services

www.4woman.gov/pregnancy/index.cfm

Breastfeeding Information

LaLeche League International

www.lalecheleague.org/

American Academy of Pediatrics

www.aap.org/healthtopics/breastfeeding.cfm

National Women's Health Information Center

www.4woman.gov/Breastfeeding/index.cfm?page=home

Exercise and Pregnancy

American Academy of Family Physicians

www.aafp.org/afp/980415ap/980415d.html

March of Dimes

www.marchofdimes.com/pnhec/159_515.asp

Fetal Alcohol Syndrome

Centers for Disease Control and Prevention

www.cdc.gov/ncbddd/fas/default.htm

Folic Acid and Birth Defects

Centers for Disease Control and Prevention

www.cdc.gov/ncbddd/folicacid/faqs.htm

North Dakota Wheat Commission

www.ndwheat.com/uploads/resources/390/folicacid-consumption.pdf

U.S. Department of Health and Human Services

www.4woman.gov/faq/easyread/folic-etr.htm

Food Safety

Food and Drug Administration

www.cfsan.fda.gov/%7Edms/wh-preg.html

Nutrition

WomensHealth.gov

www.4woman.gov/pregnancy/pregnancy/eat.cfm

USDA Food and Nutrition Information Center

http://riley.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=2&tax_subject=257&topic_id=1356&placement_default=0

Prematurity

March of Dimes

www.marchofdimes.com/prematurity/prematurity.asp

Smoking Cessation

WomensHealth.gov

www.4woman.gov/QuitSmoking/

National Partnership to Help Pregnant Smokers Quit

<http://helppregnant smokersquit.org/>

Women, Infants and Children

www.nal.usda.gov/wicworks/Topics/index.html

Julie Garden-Robinson, Ph.D., L.R.D.
Food and Nutrition Specialist

Tami Totland, L.R.D.
Food Safety Program Coordinator

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For more information on nutrition and food safety, visit the NDSU Extension Service Web site:

www.ag.ndsu.nodak.edu/food.htm

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