Food Safety for Pregnant Women & Their Babies

Expectant mothers and those preparing food for them should be especially careful when handling food because a pregnant woman’s weaker immune system makes it easier for her to get a foodborne illness. Any illness a pregnant woman gets can affect her unborn child, whose immune system is too immature to fight back.

General Food Safety Tips

- Never eat raw meat — such as steak tartare (a raw hamburger dish) — poultry or seafood, especially raw oysters and clams.
- Do not eat undercooked meat or poultry. Always check internal temperatures with a food thermometer.
- Do not eat raw or undercooked eggs and foods that have raw eggs such as Caesar salad, mousse, some custards, homemade ice cream and homemade mayonnaise.
- Do not drink raw or unpasteurized milk or foods made from raw milk.
- Do not eat raw sprouts.

Listeria monocytogenes

These foodborne bacteria can cause a woman to miscarry her unborn child. *Listeria* has been found in unpasteurized milk, imported soft cheese, hot dogs, lunchmeats and meat spreads. To prevent illness from *Listeria*, follow these recommendations:

- Keep an appliance thermometer in the refrigerator to make sure the temperature is at 41 °F or below. Keep the freezer at 0 °F or below.
- Clean your refrigerator regularly with hot water and a mild liquid dishwashing detergent, and then rinse. Wipe up spills immediately.
- Refrigerate any food marked “refrigerate”.
- Check expiration and “use-by-dates” regularly, and throw out foods if the date has passed.
- Do not eat hot dogs, luncheon meats or deli meats unless they are reheated until steaming hot.
- Do not eat soft cheeses such as feta, Brie, Camembert, blue-veined cheeses, and Mexican-style soft white types such as queso blanco and queso fresco unless the label says, “Made with Pasteurized Milk.” You can eat hard cheeses, semi-soft cheeses such as mozzarella, pasteurized processed cheese slices and spreads, cream cheese, cottage cheese and yogurt.
- Do not eat salads made in the store such as ham salad, chicken salad, egg salad, tuna salad or seafood salad.
- Do not eat refrigerated pâté, meat spreads from a meat counter, or smoked seafood found in the refrigerated section of the store. Foods that don’t need refrigeration, like canned tuna and canned salmon, are okay to eat, but must be refrigerated after opening.

For more information on *Listeria*, see HGIC 3639, *Listeriosis & Pregnancy: A Food Safety Concern*.

Methylmercury in Fish

Seafood can be an important part of a balanced diet for pregnant women. It is a good source of high quality protein and other nutrients and is low in fat. However, methylmercury in fish, if eaten regularly, can harm an unborn child’s or a young child’s developing nervous system. Always follow the advice of your doctor or health care provider.
The Food and Drug Administration (FDA) has recommended the following guidelines for pregnant women and small children.

- Do not eat large fish known to possibly contain high levels of methylmercury (shark, swordfish, king mackerel and tilefish).
- Eat up to 12 ounces (two average meals) a week of a variety of fish and shellfish that are lower in mercury. Five commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock and catfish.
- Albacore (“white”) tuna and tuna steaks have more mercury than canned light tuna. Limit albacore tuna and tuna steaks to 6 ounces (one average meal) per week.
- Limit freshwater fish caught by family and friends to one meal (6 ounces for an adult, 2 ounces for a young child) a week of cooked fish, and do not eat any other fish that week.

For more information about the levels of mercury in specific types of fish, see the FDA food safety website at www.cfsan.fda.gov/~frf/sea-mehg.html. Special advisories on fish caught from local waters can be obtained from the South Carolina Department of Health and Environmental Control (SC DHEC) at (803) 898-4300 or (888) 849-7241, or on the web at http://www.scdhec.net/environment/water/fish/.

**Toxoplasma gondii**

This parasite can be found in raw and undercooked meat, unwashed fruits and vegetables, soil, dirty cat-litter boxes and outdoor places where cat feces can be found. Follow these safe food handling, hygiene and sanitation steps to reduce your risk for becoming infected with *Toxoplasma*:

- Do not eat raw or partly cooked meat. Cook all whole cuts of meat to a minimum internal temperature of 145 °F; allow meat to rest for 4 minutes before carving or eating. Cook ground meats, mechanically tenderized meats or injected meats to at least 155 °F. Cook all poultry and wild game to at least 165 °F. Freeze meat for several days before cooking to greatly reduce the chance of infection.
- Wash your hands with soap and water for at least 20 seconds after handling raw meat and do not touch your mouth with your hands until you have washed them. (See Safely Wash Hands below.)
- All surfaces that come in contact with raw meat must be sanitized. First wash with soapy water, rinse thoroughly and then put in a solution of 1 tablespoon unscented chlorine bleach in a gallon of warm (not hot) water for at least 30 seconds.
- Rinse all fresh fruits and vegetables under lukewarm, running water before eating them, even those that will be peeled.
- Wear gloves when you garden or do anything outdoors that involves handling soil. Cats, which are a common source of *Toxoplasma gondii*, often use gardens and sandboxes as litter boxes. Wash your hands well with soap and water after outdoor activities, especially before you eat or handle any food.


**Bisphenol A (BPA) in Baby Bottles**

The effects of BPA on the pre-born, infants and young children are still being studied. The Department of Health & Human Services has made these recommendations to reduce the exposure of babies to BPA:

- Purchase BPA-free baby bottles and cups. These are now widely available and marked as BPA-free.
- Do not use old, scratched, BPA-containing bottles for feeding babies.
- Do not put boiling or very hot liquids into BPA-containing bottles or other plastic food containers. Boil water to be mixed with powdered formula in BPA-free containers and cool to lukewarm before filling bottles.
- Allow bottles to cool down, after being sterilized and cleaned, and before adding infant formula.
- Do not heat cans of infant formula on the stove or in boiling water. Ready-to-feed liquid formula can be served at room temperature or gently warmed in a nursing bottle by running warm water over the outside of the bottle.
Infants & Toddlers
In addition to the restrictions above, never feed the following foods to infants and toddlers:

- Honey or corn syrup to infants less than one year old, because of possible contamination with *Clostridium botulinum*, which can cause botulism.
- Raw or unpasteurized milk.
- Unpasteurized juices found in the refrigerated sections of grocery stores, health-food stores, cider mills or farm markets.
- Juices that are fresh-squeezed and sold by the glass, such as at farmer’s markets, roadside stands, or in some juice bars.
- Tea brewed from star anise. Brewed “teas” containing star anise have been associated with illnesses in infants including seizures, vomiting, jitteriness and rapid eye movement.
- Foods that may cause a small child to choke. For a list of these foods see HGIC 4102, *Introducing Solid Foods to Infants*.

Safely Wash Hands
Your hands can pick up and spread bacteria to your baby whose immune system may not be developed enough to fight off infections. Your hands can pick up bacteria from:

- Diapers containing feces and urine
- Raw meat, poultry, seafood and eggs
- Pets such as dogs, cats, turtles, snakes, birds and lizards

Wash your hands often to remove harmful bacteria, and teach your children how and when to wash their hands. Follow these steps to wash hands properly:

1. Wet your hands thoroughly with warm water and then add soap.
2. Thoroughly scrub your hands, wrists, fingernails and in between fingers for at least 20 seconds.
3. Rinse, then dry hands with a clean cloth towel or use a paper towel so the germs are thrown away.

Safely Handle Baby Bottles
Clean: Wash and rinse bottles, bottle caps and nipples then sterilize by boiling for five minutes or more just before refilling. To sanitize in the dishwasher, the dishwasher must reach 165 °F or hotter. (Check the equipment manual to be sure of the temperature.)

Refrigerate: Keep filled bottles of formula or breast milk in the refrigerator until just before feeding. Refrigerate open containers of ready-to-feed or concentrated formula.

Warming: Place bottles in hot (not boiling) water for 5 minutes. Shake well to even out the temperature and test to make sure it is not too hot before feeding. The milk should barely feel warm when tested on top of your hand (not on the wrist which is one of the areas least sensitive to heat).

Microwave: Never microwave baby bottles. Microwaves heat unevenly resulting in “hot spots” that can scald the baby’s mouth and throat.

Safely Store Breast Milk
- Always wash hands before expressing milk.
- Store in sterilized bottles at 41 °F or below in the refrigerator, or in the freezer at 0 °F or below.
- Breast milk is best refrigerated or chilled promptly, but may be safely kept at room temperature (up to 79 °F) for 4 to 6 hours.
- Label each container with the name of the child, date and time milk was pumped.
- Refrigerate promptly and store in the back of the main part of the refrigerator; use within 8 days. Or freeze and use within 2 weeks if stored in the small freezer compartment inside a refrigerator, or within 3–4 months in a separate freezer located on top of, or on the side of, the refrigerator, or in a stand-alone freezer.

Safely Store Baby’s Bottles
- Discard used milk from bottles immediately. Bacteria from the baby’s mouth contaminate the milk where it can grow and multiply.
- Discard unused prepared formula after 24 hours.
- Discard open containers of ready-to-feed or concentrated formula after 48 hours.
Safely Handle Jars of Baby Food

- Throw out baby food jars if the “use-by” date has passed.
- Wash the outside of the baby food jar and lid before opening the jar.
- Check to see that the safety button in the lid is down. If the jar lid doesn’t “pop” when opened, or is not sealed completely, don’t use it.
- Do not tap the jar lid with a utensil or other object or bang it against a hard surface—this could break glass chips into the food. Always look at the food for any abnormal pieces when removing it from the jar.
- Do not keep food leftover in the serving dish because bacteria on the spoon from the baby’s mouth will contaminate any remaining food.
- Do not heat baby food jars in the microwave oven. Baby food microwaved in a jar often heats unevenly, with the food in the center being the hottest. To warm food in the microwave oven, spoon a portion into a microwave-safe dish and heat on HIGH for about 8 seconds. Stir, let stand 30 seconds and stir again. Test for lukewarm temperature before feeding. Or, heat the jars following instructions for warming bottles in the section above on Safely Handle Baby Bottles.

Safely Store Opened Jars of Baby Food

- Store strained fruits and vegetables for 2 to 3 days in the refrigerator or for 6 to 8 months in the freezer.
- Store strained meats and eggs, and meat and vegetable combinations for a day in the refrigerator or for 1 to 2 months in the freezer.
- Store homemade baby foods for 1 to 2 days in the refrigerator or for 3 to 4 months in the freezer. For information on homemade baby foods, see HGIC 4259, Making Your Own Baby Food.
- For individual servings, freeze strained foods in ice cube trays then place cubes in freezer bags.
- Reheat refrigerated foods to steaming hot, then cool to lukewarm temperature before serving.

Sources:

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