Put food safety risks during pregnancy into perspective

**TABLE 1** Safe food preparation and storage

1. **Clean**
   - Wash hands thoroughly with soap and water, especially before and after handling food and after using the bathroom, changing diapers, or handling pets. Patients shouldn’t touch mucous membranes after handling meats.
   - Wash cutting boards, dishes, utensils, and countertops with hot water and soap. Washing utensils, including cutting boards, in the dishwasher is even better.
   - Rinse raw fruits and vegetables thoroughly under running water, even if the skin won’t be eaten.
   - To minimize cross-contamination, meat and poultry should not be washed or rinsed.

2. **Separate to avoid cross-contamination**
   - Separate raw meat, poultry, and seafood from ready-to-eat foods when shopping, preparing, and storing foods.
   - Use one cutting board for raw meat, poultry, and seafood and another one for fresh fruits and vegetables.
   - Place cooked food on a clean plate. Cooked food placed on an unwashed plate that held raw meat, poultry, or seafood may become contaminated.

3. **Cook to proper temperature**
   - Cook foods thoroughly. Use a food thermometer to check the temperature, remembering that color is not a reliable indicator of meat doneness. For target temperatures, see [www.fsis.usda.gov/Factsheets/Keep_Food_Safe_Food_Safety_Basics/index.asp](http://www.fsis.usda.gov/Factsheets/Keep_Food_Safe_Food_Safety_Basics/index.asp).

4. **Chill to avoid the danger zone**
   - Household refrigerators should register at 40°F (4°C) or below and the freezer at 0°F (-18°C). Check the temperature periodically with an appliance thermometer.
   - Keep foods out of the danger zone, the range of temperatures at which bacteria can grow, usually between 40°F and 140°F (4°C and 60°C).
   - Defrost (and marinate) foods in the refrigerator, not on the kitchen counter.
   - Refrigerate or freeze perishables (foods that can spoil or become contaminated by bacteria if left unrefrigerated) promptly.
   - Use ready-to-eat, perishable foods (dairy, meat, poultry, seafood, produce) as soon as possible.
   - 2-hour rule: Discard perishable foods left out at room temperature for more than 2 hours. If it is a hot day (above 90°F), shorten the time to 1 hour.

5. **Avoid these high-risk foods**
   - Unpasteurized milks or foods made of unpasteurized milks.
   - Raw or undercooked meats, poultry, eggs, fish, or seafood.
   - Unpasteurized fruit or vegetable juices; no sprouts unless cooked.
   - Don’t open bulging cans: Boil home-canned foods for 20 minutes.
   - Pay attention to food recalls. This is not the time to gamble.

Information from: Athea et al.; CDC; FDA; Mentea et al.; USDA; FSIS.

**TABLE 2** Safe eating during pregnancy

1. **Follow the guidelines in Table 1, including:**
   - Avoid cross-contamination with the fluid from hot dog packages.
   - Keep raw meats separated from vegetables, cooked foods, and ready-to-eat foods.
   - Eat perishable and ready-to-eat foods (dairy, meat, poultry, seafood, produce) as soon as possible.
   - Check for “use by” dates every week and throw out food that has passed that date.
   - Follow recommended storage times for foods.
   - Wipe up spills immediately. Clean the refrigerator regularly with hot water and mild liquid detergent, rinse.

2. **Choose lower-risk foods**
   - Avoid unpasteurized milk or any foods made from raw milks.
   - Make sure soft cheeses (feta, brie, Camembert, blue-veined, or Mexican-style queso blanco, queso fresco, or panela) are made with pasteurized milk.
   - Don’t eat hot dogs, luncheon meats, or deli meats unless reheated to steaming (165°F). Meats may be chilled afterward. As an alternative, cooked meats or canned meats (salmon, chicken, tuna) may be used for sandwiches.
   - Don’t eat refrigerated pates or meat spreads. Canned or shelf-stable versions may be eaten.
   - Don’t eat refrigerated smoked seafood unless it’s in a cooked dish. This includes smoked salmon, trout, whitefish, cod, tuna, and mackerel. They are often labeled “nova-style,” “lox,” “kippered,” “smoked,” or “jerky.” They’re found in the refrigerator section or sold at the deli counter. Canned or shelf-stable versions may be eaten.

Information adapted from: FDA; CDC; FDA.
<table>
<thead>
<tr>
<th>Table 3</th>
<th>Toxoplasma guidelines</th>
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<tbody>
<tr>
<td>1.</td>
<td>Follow the general guidelines from Table 1.</td>
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<td>2.</td>
<td>Freeze meats for several days before cooking.</td>
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<tr>
<td>3.</td>
<td>Cook meats to at least 160°F (71.1°C) (Some meats and poultry require higher temperatures to kill other pathogens). Do not sample meat until it is cooked. Meats that are smoked, cured in brine, or dried may still be infectious.</td>
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<td>4.</td>
<td>Keep children’s sandboxes covered.</td>
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<td>5.</td>
<td>Wear gloves when gardening or handling sand from a sandbox. Wash hands thoroughly afterward.</td>
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<td>6.</td>
<td>Peel or thoroughly wash fruits and vegetables before eating.</td>
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<td>7.</td>
<td>Wash hands after handling raw meats.</td>
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<tr>
<td>8.</td>
<td>Keep your cat indoors. Don’t feed them raw or undercooked meats or unpasteurized milks.</td>
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<td>9.</td>
<td>Clean the litter box daily. If possible, have someone else change the litter box. If not, wash hands with soap and warm water afterward. Disinfect empty litter box with near-boiling water for 5 minutes before refilling.</td>
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<td>10.</td>
<td>Don’t get a new cat while pregnant or handle stray cats, especially kittens.</td>
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<td>11.</td>
<td>Avoid unpasteurized milk, including goat’s milk.</td>
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<td>12.</td>
<td>Don’t drink water from the environment unless it is boiled.</td>
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<td>13.</td>
<td>Control rodents and other potential intermediate hosts.</td>
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<td>14.</td>
<td>If butchering wild game or venison, bury the organs so that feral cats can’t eat them and spread the infection.</td>
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Information adopted from: FDA¹; Moneye et al.²; Dubey et al.³; Jones et al.⁴; Cornell University⁵; CDC.⁶