Food Safety Guidelines During Chemotherapy and Radiation

Foodborne illness, or “food poisoning,” is any illness caused by eating a food that is contaminated with a bacteria, virus, mold or parasite. Examples of organisms that can cause a food borne illness include *E. coli*, *Salmonella* and *Listeria*. Foodborne illness may come from several sources, including improper food handling, a contaminated work surface, or the food itself.

Bacteria and other organisms exist commonly in foods. Most of these organisms are of little risk to the average healthy person. However, persons undergoing treatment such as chemotherapy or radiation are at a higher risk for infections, including foodborne illness. Following food safety guidelines reduces risk for foodborne illness.

For more detailed information, see the “Guidelines for Immunosuppressed Patients” at http://www.seattlecca.org/client/documents/practical-emotional-support/HSC-Diet-for-Immunosuppressed-Patients-032508_5888_0.pdf

If you have any questions regarding food safety and diet guidelines, please ask your scheduler or team coordinator to set up an appointment with a registered dietitian (RD).

### Tools for Food Safety
- Food and refrigerator thermometer
- Hand soap
- Clean towels (cloth or paper)
- Bleach solution to sanitize surfaces and cookware

### Bleach Solution
1. Mix 1/3 cup unscented household bleach with 3 1/3 cups water. Keep in a spray bottle.
2. Use solution to clean and sanitize kitchen, cutting boards, and other household surfaces.
3. Remake solution daily.

### Wash Hands and Surfaces Often

#### Personal Hygiene
- Wash hands frequently with soap and warm, running water. Use a rubbing motion for 15 seconds prior to food preparation, before eating, after using the restroom, handling garbage, and touching pets.

#### Kitchen Cleanliness
- Sanitize sponges daily. You may soak them in the bleach solution for five minutes, heat them in a microwave on high for one minute, or run them through the dishwasher.
- Air-dry dishes instead of towel-drying them.
Avoid Cross-Contamination

At the Grocery Store
- Avoid unpasteurized products, including juice, milk, yogurt, and cheese (such as queso-fresco or Camembert), and unpasteurized pickles.
- Do not taste unpackaged food samples.
- Check eggs before purchasing; do not purchase or use cracked eggs. Pasteurized eggs, liquid pasteurized egg products (such as Eggbeaters®) and powdered egg whites may be used in recipes calling for raw eggs in foods that will not be cooked.
- Place meat, poultry and fish in separate plastic bags. Keep these bags separate from each other and other food items.

At Home
- Use a clean knife for cutting different foods (for example, use different knives for cutting meat, produce and bread).
- During food preparation, do not taste the food with the same utensil used for stirring. Use a clean utensil each time you taste food while preparing or cooking.
- In the refrigerator, store raw meat separately from ready-to-eat foods, preferably on the bottom shelf.
- When grilling, always use separate plates for raw and cooked meat.

Fruit and Vegetable Handling
All fresh produce may carry bacteria or other organisms that can cause foodborne illness. The term “natural” or “organic” refers to growing without the use of chemical fertilizers or pesticides. It has no relationship to the cleanliness or safety of the product. Use the following guidelines for handling all raw produce.
- Rinse produce thoroughly under clean, running water just before use, including produce that is to be peeled (such as bananas, melons and oranges) or cooked. Do not wash fruits and vegetables with soaps, detergents or chlorine bleach solutions. Produce can absorb these cleaning agents, and they are not any more effective at removing bacteria than running water.
- Do not purchase produce that has been cut at the grocery store (such as melon or cabbage halves). This is particularly true for produce that will not be cooked prior to eating.
- Scrub produce that has a thick, rough skin or rind (such as cantaloupe or potatoes) or has visible dirt on the surface by using a clean vegetable scrubber.
- Rinse leaves of leafy vegetables (such as lettuce, spinach, cabbage) individually under running water. Wash packaged salad, slaw mixes or other prepared produce (even those marked pre-washed). You may use a salad spinner or colander.
- Do not eat any raw vegetable sprouts (avoid all types, including alfalfa sprouts, clover sprouts, mung bean sprouts, and so on) due to high risk of Salmonella and E. coli contamination. Cooked mung bean sprouts are acceptable.
- Throw away fruit and vegetables that are slimy or show mold.
Cutting Boards
- Use different cutting boards for raw meat and animal products, produce and bread. We suggest using different colored cutting boards for different foods (e.g., red for meat, green for produce, yellow for bread). Wooden cutting boards are considered safe if they are used exclusively for raw meat and poultry.
- Wash cutting boards with hot, soapy water after each use; then air dry. Non-porous acrylic, plastic or glass boards and solid wood boards can be washed in a dishwasher (laminated boards may crack or split).

Food Storage
- Check expiration dates. Do not use foods past the expiration dates. These include fresh meats, poultry, seafood, dairy products, eggs, cereals, canned goods, etc.
- Keep food storage areas clean.

Keep Foods at Safe Temperatures

Refrigeration
- Keep the refrigerator temperature between 34° and 40°F; keep the freezer temperature between 0° and 2°F.
- Thaw and marinate foods in the refrigerator, never on the counter or at room temperature.
- Store and thaw meat, fish and poultry on the bottom shelf of the refrigerator, with no other raw fruits and vegetables near. Cook defrosted meat immediately, do no refreeze it.
- Cool hot foods in shallow dishes in the refrigerator, cover storage container tightly after cooling.
- Throw away or freeze all prepared foods/leftovers within 72 hours (3 days). Use labels or masking tape to write dates.
- Never taste food that looks or smells strange.

Cook Foods Thoroughly
- Use a thermometer to test if food has heated to the proper temperature.
- Cook meat until it is no longer pink and the juices run clear. These are signs that the meat may be cooked to a proper temperature. However, the only way to be sure that the meat has been cooked to the proper temperature is to use a food thermometer.
- Heat all hot dogs, ready-to-eat luncheon meats, cold cuts and deli-style meats to 165° (or until just steaming in the microwave) before eating.
- Do not eat uncooked foods containing raw or undercooked eggs, including soft boiled eggs, raw cookie dough, cake batter, or salad dressings.
- Hold foods at safe temperatures: hot food above 140°F, cold food below 40°F.
- If using a microwave, rotate the dish a quarter or half-turn once or twice during cooking and stir food several times during heating.

Other Food Safety

Dining Out Safely
- Ask that fast-food establishments prepare food fresh (for example, a hamburger should be fresh off the grill, not under a heat lamp).
- Avoid raw fruits and vegetables when dining out. Eat these foods at home where you can control the safety and preparation.
- Ask for single-serve condiment packages. Do not use self-serve condiment containers, including salsa.
- Avoid salad bars, delicatessens, buffets, smorgasbords, potlucks, food trucks, and sidewalk vendors.
- Pack your own leftovers; have the server bring you a box. Refrigerate promptly.
**Water Safety Guidelines**

**Tap Water**
- Water from your home faucet is considered safe if the water is from a city water supply or a municipal well that serves highly populated areas.

**Well Water**
- Well water from private or small community wells is *not* considered safe for consumption by persons considered immunosuppressed and at risk for infection, unless it is tested daily and found to be negative for coliforms and *Cryptosporidium* organisms. It is recommended that other approved water sources be used instead, including boiled water or bottled water (see guidelines below).
- Municipal wells serving highly populated areas are considered safe because the water is tested for bacterial contamination more than twice daily.
- Common home filtration systems (Brita® or Pur®) and refrigerator-dispensed water and ice machines *do not* remove bacteria or viruses, and therefore are *not considered safe*. If the well water supply is chlorinated per guidelines provided by your local health department, the chlorinated water that is treated with one or more of the following is considered safe to consume:
  - Reverse osmosis
  - Distillation
  - Filtered through an absolute 1 micron or smaller filter (NSF Standard #53 for cyst removal)

**Safe Water Sources**
The following sources of water are suggested if your water is not from a city water or municipal well supply.
- Boiled water: Bring water to a rolling boil for at least fifteen to twenty minutes. The boiled, cooled water should be stored in a clean, covered container for up to 48 hours (two days).
- Bottled water: Bottled water labeled as having been treated with one or more of the following are considered safe: reverse osmosis treated, distillated, or filtered through an absolute 1 micron or smaller filter (NSF Standard #53 for cyst removal).
- Contact the International Bottled Water Association (www.bottledwater.org, or 1-800-928-3711) to be sure a specific brand of water has undergone one of the above processes.