Diet Guidelines for Immunosuppressed Patients

You may have decreased immune function because of chemotherapy and/or radiation therapy or from taking medications to suppress your immune system. This means that you are at increased risk of developing a food-related infection. The purpose of this diet is to help you avoid specific foods that are more likely to contain infection-causing organisms while allowing maximum healthy food choices. Choose foods from the “May eat” column and don’t choose foods in the “Do not eat” column. You may want to discuss the safety of these or other foods with your dietitian or care team.

In general, we recommend this diet for the following:

- **General oncology and cellular immunotherapy patients**: follow this diet when you have a low white blood cell count. A low white blood cell count refers to a neutrophil count less than 1000 mm$^3$ or when chemotherapy is held due to low neutrophil count.

- **Autologous transplant patients**: follow this diet during the first three months after chemotherapy or transplant.

- **Allogeneic transplant patients**: follow this diet until you are off all immunosuppressive therapy such as cyclosporine, prednisone, tacrolimus, Myfortic®, sirolimus, or MMF.

### Guidelines

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<th>Food groups</th>
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| Dairy       | • All pasteurized, grade “A” milk and milk products including eggnog, yogurt, ice cream, frozen yogurt, sherbet, ice cream bars, milkshakes, processed cheese slices and spreads, cream cheese, cottage cheese and ricotta cheese  
• Dry, refrigerated, or frozen pasteurized whipped topping  
• Commercially packaged hard and semi-soft cheeses such as cheddar, mozzarella, parmesan, Swiss, Monterey Jack, etc. | • Non-pasteurized or raw milk and milk products made from non-pasteurized or raw milk.  
• Cheeses from delicatessens  
• Cheese containing chili peppers or other uncooked vegetables  
• Cheeses with molds (such as blue, Stilton, Roquefort, gorgonzola) |
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| (Dairy continued) | • Cooked and pasteurized soft cheeses such as brie, goat, camembert, feta, farmer’s cheese. Though not completely risk free, the risk of contracting food borne illness from **cooked**, soft cheeses is low.  
• Commercially sterile ready-to-feed and liquid-concentrate infant formulas (avoid powdered infant formulas if a ready-to-feed or liquid concentrate alternative is available) | • Mexican-style soft cheese such as queso fresco, queso blanco (unless it is made with pasteurized milk and cooked) |
| Meat and meat substitutes | • All meats cooked to well done (see temperature guide attached) or canned meats (beef, pork, lamb, poultry, fish, shellfish, game, ham, bacon, sausage, hot dogs)  
• Eggs cooked until both white and yolk are firm  
• Pasteurized eggs and egg substitutes (such as Egg Beaters®), and powdered egg white (all can be used uncooked)  
• Commercially packaged salami, bologna, hot dogs, ham and other luncheon meats, heated until steaming  
• Canned and shelf-stable¹ smoked fish (refrigerate after opening)  
• Pasteurized or cooked tofu²  
• Refrigerated smoked seafood such as salmon or trout if cooked to 160°F or contained in a cooked dish or casserole | • Raw or undercooked meat, poultry, fish, game, tofu²  
• Raw or undercooked eggs and non-pasteurized egg substitutes; no eggs over easy, soft-boiled eggs, or poached eggs.  
• Meats and cold cuts from delicatessens  
• Hard cured salami in natural wrap  
• Uncooked refrigerated smoked, seafood such as salmon or trout labeled as “nova-style,” “lox,” “kippered,” “smoked” or “jerky”  
• Pickled fish  
• Tempe (tempeh) products |

¹ Shelf-stable refers to unopened canned, bottled, or packaged food products that can be stored before opening at room temperature; container may require refrigeration after opening.

² Aseptically packaged, shelf-stable tofu and pasteurized tofu do not need to be boiled. Unpasteurized tofu must be cut into 1-inch cubes or smaller and boiled a minimum of five minutes in water or broth before eating or using in recipes.
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<td><strong>Fruits and nuts</strong></td>
<td>• Well washed³ raw fruit; foods containing well washed raw fruits&lt;br&gt;• Cooked, canned and frozen fruit&lt;br&gt;• Pasteurized juices and frozen juice concentrates&lt;br&gt;• Dried fruits&lt;br&gt;• Canned or bottled roasted nuts&lt;br&gt;• Shelled, roasted nuts and nuts in baked products&lt;br&gt;• Commercially packaged nut butters (such as peanut butter, almond butter, or soybean butter)</td>
<td>• Unwashed raw fruits&lt;br&gt;• Unroasted raw nuts&lt;br&gt;• Roasted nuts in the shell&lt;br&gt;• Non-pasteurized fruit and vegetable juices&lt;br&gt;• Pre-cut fruit&lt;br&gt;• Fresh fruit salsa found in the grocery refrigerator case&lt;br&gt;• Non-pasteurized items containing raw fruits found in the grocery refrigerator case</td>
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<td><strong>Entrees and soups</strong></td>
<td>• All cooked entrees and soups&lt;br&gt;• Commercially prepared pasteurized miso products</td>
<td>• Home-made or restaurant prepared miso products&lt;br&gt;• Self-serve soups at grocery stores and restaurants</td>
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<td><strong>Vegetables</strong></td>
<td>• Well washed³ raw vegetables&lt;br&gt;• All cooked fresh, frozen, or canned vegetables, including potatoes&lt;br&gt;• Shelf-stable¹ bottled salsa (refrigerate after opening)&lt;br&gt;• Cooked vegetable sprouts (such as mung bean sprouts)&lt;br&gt;• Fresh, well washed³ herbs&lt;br&gt;• Dried herbs and spices (added to raw or cooked foods)</td>
<td>• Unwashed raw vegetables or herbs&lt;br&gt;• Pre-cut vegetables&lt;br&gt;• Fermented vegetables such as kimchi or non-pasteurized sauerkraut&lt;br&gt;• Fresh, non-pasteurized vegetable salsa found in the grocery refrigerator case&lt;br&gt;• Non-pasteurized items containing raw vegetables found in the grocery refrigerator case&lt;br&gt;• All raw vegetable sprouts (alfalfa sprouts, clover sprouts, mung bean sprouts, all others)&lt;br&gt;• Salads from delicatessens and restaurants</td>
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³ Rinse under clean, running water before use, including produce that is to be cooked or peeled (such as bananas, oranges, and melon).
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| **Bread, grain, and cereal products** | • All breads, bagels, rolls, English muffins, muffins, pancakes, sweet rolls, waffles, French toast  
• Potato chips, corn chips, tortilla chips, pretzels, popcorn  
• Cooked grains and grain products, including pasta and rice  
• All cereals, cooked and ready-to-eat | • Raw (not baked or cooked) grain products (such as raw oats) |
| **Beverages**                | • Boiled well water  
• Tap water and ice made from tap water  
• Commercially-bottled distilled, spring and natural waters  
• All canned, bottled and powdered beverages  
• Instant and brewed coffee and tea; cold brewed tea made with boiling water  
• Herbal teas brewed from commercially-packaged tea bags  
• Commercial nutritional supplements, both liquid and powdered  
• Commercially sterile ready-to-feed and liquid-concentrate infant formulas (avoid powdered infant formulas if a ready-to-feed or liquid concentrate alternative is available) | • Well water that has not been boiled  
• Cold-brewed tea made with warm or cold water  
• Non-pasteurized fruit and vegetable juices  
• Mate tea  
• Kombucha  
• Wine, unpasteurized beer (Note: All alcoholic beverages should only be consumed following health care provider approval) |

4 Bring tap water to a rolling boil and boil for 15-20 minutes. Store boiled water in the refrigerator. Discard water not used within 48 hours (2 days).
5 Recommend using boiled or bottled water if using a water service other than city water service. Please see Water Safety Guidelines in “Food Safety Guidelines”.
6 See Water Safety Guidelines in “Food Safety Guidelines” for approved bottled water treatments.
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<td>Desserts</td>
<td>- Refrigerated commercial and homemade cakes, pies, pastries and pudding  &lt;br&gt;- Refrigerated cream-filled pastries  &lt;br&gt;- Cookies, both homemade and commercially prepared  &lt;br&gt;- Shelf-stable³ cream-filled cupcakes (such as Twinkies®, Ding Dongs®) and fruit pies (such as Pop-Tarts® and Hostess® fruit pies)  &lt;br&gt;- Canned and refrigerated puddings  &lt;br&gt;- Ices, popsicles and similar products  &lt;br&gt;- Candy, gum</td>
<td>- Unrefrigerated cream-filled pastry products (not shelf-stable³)  &lt;br&gt;- Desserts from self-service areas (donuts in case, etc)</td>
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<td>Fats</td>
<td>- Vegetable oils and shortening  &lt;br&gt;- Refrigerated lard, margarine, butter  &lt;br&gt;- Commercial, shelf-stable³ mayonnaise and salad dressings including Blue Cheese and other cheese-based salad dressings (refrigerate after opening)  &lt;br&gt;- Cooked gravy and sauces</td>
<td>- Fresh salad dressings (stored in the grocer’s refrigerated case) containing raw eggs or cheeses listed as “Do not eat” under “Dairy”</td>
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<td>Other</td>
<td>- Commercial pasteurized Grade A honey  &lt;br&gt;- Salt, granulated sugar, brown sugar  &lt;br&gt;- Jam, jelly, syrups (refrigerate after opening)  &lt;br&gt;- Ketchup (or “catsup”), mustard, BBQ sauce, soy sauce, other condiments (refrigerate after opening)  &lt;br&gt;- Pickles, pickle relish, olives (refrigerate after opening)  &lt;br&gt;- Vinegar</td>
<td>- Raw honey; honey in the comb  &lt;br&gt;- Herbal and nutrient supplement preparations (refer to Guidelines for Use of Herbal and Nutrient Supplements in Patient &amp; Caregiver Resource Manual)  &lt;br&gt;- Brewer’s yeast, if uncooked</td>
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This education resource was intended to be given as a part of a nutrition consult by a Fred Hutchinson Cancer Center dietitian. Questions? Ask a Fred Hutch dietitian at nutrition@seattlecca.org.