



Cell Therapy Nutrition Guide

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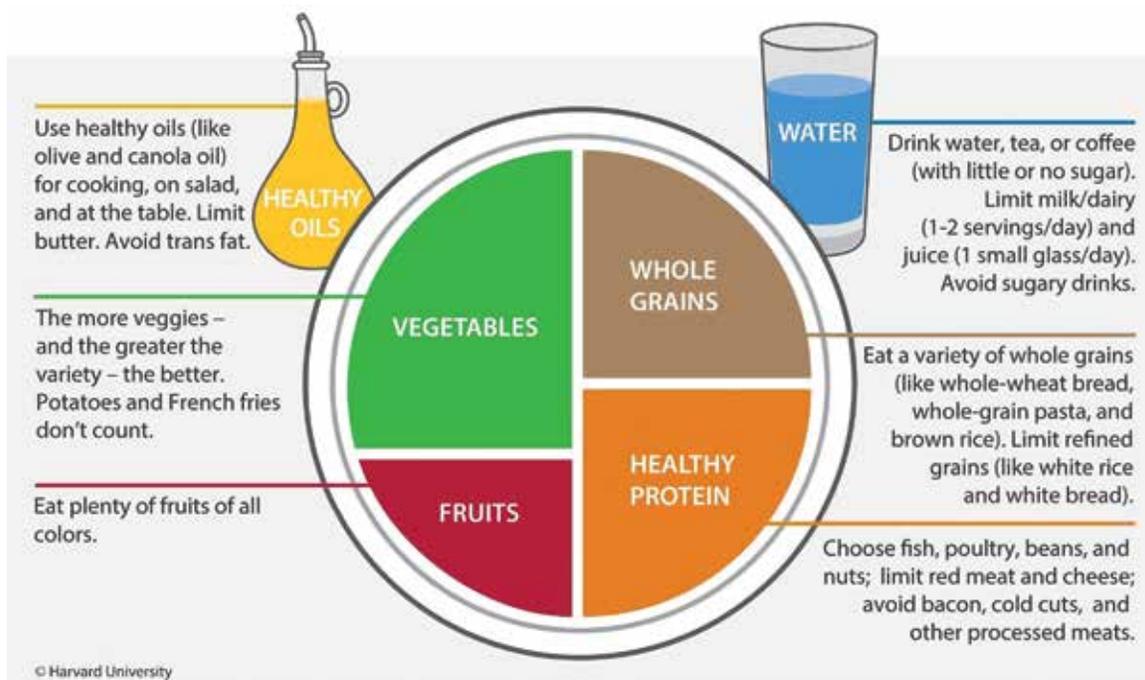
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Patients with decreased immune function as a result of undergoing chemotherapy or radiation therapy are at increased risk of developing a food-related infection. The purpose of this diet is to help you avoid specific foods that are more likely to contain infection-causing organisms.

Meal Planning

The best diet for cancer patients and survivors is one that contains fruits, vegetables, whole grains, foods rich in healthy fats like omega-3 and monounsaturated fats, and healthy proteins. At every meal, you should have a healthy balance of foods by planning your plate into these sections

- 1/2 of your plate with vegetables and/or fruits
- 1/4 of your plate with healthy meats or proteins
- 1/4 of your plate with whole grains or starchy vegetables
- a small amount of healthy fats
- plenty of water



If you have a poor appetite, small meals eaten more often may be easier for you to eat than larger meals. Choose high-calorie foods if you can't eat much. Good choices may include

- Breaded meats
- Vegetables with sauces
- Starches such as rice, potatoes, and pasta
- Fruits and vegetables with toppings or dips
- Whole milk products and cheese



If you are losing weight because you cannot eat enough, talk to your physician or dietitian. Commercial supplements may be helpful between meals.

Shopping and Cooking Tips

- Buy foods in small amounts so they will be fresh when eaten.
- Check food for bruises, broken skins, rot, and mold. Do not use food that looks or smells bad.
- Cook meats, fish, poultry, and eggs until well done.
- Keep cold foods cold (less than 40°F) and hot foods hot (more than 140°F).
- Clean all cooking tools, pots, and dishes completely before and after use.
- Wash hands well before, during, and after preparing and eating food.
- Do not share your food with other people.
- Do not keep refrigerated leftovers for more than 3 days.
- Pre-packaged items should be unopened and used before the expiration date. Refrigerate as appropriate.
- If eating outside the home
 - Only eat food from a reputable restaurant.
 - Avoid buffets.
 - Avoid salads and cold sandwiches – choose hot food.



Cooking to the Right Temperature

Proper cooking temperatures kill harmful bacteria that are present in food. Use a meat thermometer to check the doneness of meat, poultry, seafood, and dishes containing eggs. The US Food and Drug Administration (FDA) recommends safe minimum internal temperatures for numerous foods.

Type of Food	Safe Minimal Internal Temperature
Beef, pork, veal, lamb	145°F with a 3-minute rest
Ground beef, pork, veal, and lamb	160°F
Poultry (chicken, turkey, duck)	165°F
Egg dishes	160°F or until yolk and white are firm
Fish and shellfish	145°F and flesh is opaque
Leftovers and casseroles	165°F



Handling Produce (Fresh Fruits and Vegetables)

- At the store, buy produce that is not bruised or damaged.
- After purchase, put produce that needs refrigeration away promptly.
- Fresh produce should be refrigerated within 2 hours of peeling or cutting.
- Don't cross-contaminate. Use clean cutting boards and utensils when handling fresh produce. If possible, use one clean cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
- Do not consume ice that has come into contact with fresh produce or other raw products.
- Use a cooler with ice or use ice gel packs when transporting or storing perishable food outdoors, including cut fresh fruits and vegetables.



Diet Guidelines Charts

In the charts on the following pages, choose foods from the “Foods to Choose (Safe)” column. These are foods you can eat any time. **Do not eat foods in the “Foods to Avoid (Unsafe)” column of the charts.** These are foods that are at increased risk for foodborne illness. Your physician will let you know when the diet is no longer required.

Dairy

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • All pasteurized milk and milk products • Commercially packaged cheese (such as American, cheddar, mozzarella, Parmesan, Swiss) • Commercially packaged cheese products (cream cheese, sour cream, cottage cheese, ricotta cheese) • Pasteurized yogurt • Refrigerated or frozen pasteurized whipped topping • Ice cream, frozen yogurt, sherbet • Commercial medical nutrition supplements (liquid and powdered) • Commercial eggnog 	<ul style="list-style-type: none"> • Unpasteurized or raw milk, cheese, yogurt, and other milk products • Cheese containing chili peppers or other uncooked vegetables (pepperjack, etc) • Cheeses with molds (blue, stilton, Roquefort, gorgonzola) • Soft cheeses (brie, camembert, feta, farmer’s cheese) • Mexican-style cheeses (queso fresco, queso blanco) • Cheeses from the deli counter • Homemade eggnog or ice cream (contain raw egg) • Soft-serve ice cream or yogurt

Meats and Other Proteins

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • All meats cooked to proper temperature (beef, pork, lamb, poultry, veal, alligator) and seafood (fish, crabs, shrimp, lobster) • Canned meat or fish and meat spreads (refrigerate after opening) • Well cooked eggs and egg substitutes • Commercially packaged meats (salami, bologna, hot dogs, sausage, ham and other deli meats, heated until steaming) • Well-cooked tofu • Smoked salmon or other fish cooked to 160°F • Commercially packaged jerky 	<ul style="list-style-type: none"> • Raw or undercooked meat (beef, pork, lamb, poultry, veal, alligator) and seafood (fish, crabs, shrimp, lobster) • Oysters and clams • Raw tofu • Raw or undercooked eggs (eggs over easy, soft-boiled eggs, or poached eggs) and egg substitutes • Sliced meats from the deli counter • Sushi, sashimi, ceviche, and cold smoked seafood (such as lox) • Tempe (tempeh) products • Wild game, homemade jerky, road kill

Fruits and Vegetables

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • Canned or frozen fruits and vegetables • Well-washed raw fruits and vegetables • Dried fruits • Shelf-stable bottled salsa (refrigerate after opening) 	<ul style="list-style-type: none"> • Unwashed raw fruits or vegetables • All raw vegetable sprouts (alfalfa, radish, mung bean, etc) • Grapefruit or grapefruit flavored food and drinks • Store-bought preprepared cold food items (pasta salad, chicken/tuna salad, dips, etc)

Grains and Nuts

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • All cooked bread products (bagels, muffins, waffles, pancakes, etc) • Chips, pretzels, crackers, popcorn • Cooked grains and grain products (pasta, rice, etc) • All cereals including cooked and ready-to-eat • Canned or bottled shelled and roasted nuts/seeds • Nuts in baked products and candied nuts • Commercially packaged nut butter 	<ul style="list-style-type: none"> • Breads, rolls, and pastries in self-service bins • Uncooked grain products such as raw oats • Unroasted raw nuts/seeds • Roasted nuts/seeds in the shell • Raw nut butters



Drinks

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • Tap water and ice made from tap water • Commercially bottled distilled, spring, natural waters • All canned or bottled beverages • Pasteurized fruit or vegetable juices • Instant and brewed coffee • Hot brewed tea • Commercial nutrition supplements (liquid and powdered) 	<ul style="list-style-type: none"> • Well water • Cold-brewed tea • Maté tea • Kombucha • All alcoholic beverages (unless approved by physician) • Unpasteurized fruit and vegetable juices



If using a water service other than city-provided water, we recommend using boiled or bottled water.

Desserts

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • Refrigerated, cream-filled pastries, cakes, or pies • Homemade and commercial cookies, cakes, or pies • Shelf-stable cream-filled cupcakes or fruit pies • Italian ice and Popsicles • Candy, gum, chocolate 	<ul style="list-style-type: none"> • Unrefrigerated, cream-filled pastries, cakes, cookies, donuts, king cake (not shelf-stable) • Raw cookie dough or cake/ brownie batter

Miscellaneous

Foods to Choose (Safe)	Foods to Avoid (Unsafe)
<ul style="list-style-type: none"> • Oil, shortening • Refrigerated lard, margarine, butter • Commercial, shelf-stable mayonnaise and salad dressings (refrigerate after opening) • Cooked gravy and sauces • Salt, sugar • Commercial jam, jelly, syrups, ketchup, mustard, barbeque sauce, soy sauce, pickles, olives, vinegar (refrigerate after opening) 	<ul style="list-style-type: none"> • Refrigerated or homemade fresh salad dressings containing aged cheese (Blue, Roquefort) or raw eggs (Caesar) • Homemade mayonnaise • Hollandaise sauce • Herbal and non-traditional nutrient supplement, including probiotics • Homemade preserves, jams or jellies • Miso products (such as miso soup or paste)

