

Safe Eating for Poor Immune Function

People with weakened immune systems are more at risk of food poisoning, and this includes those undergoing chemotherapy with low neutrophils (i.e. neutropenic). As well as the general recommended food safety guidelines which emphasise hand washing and safe steps in food shopping, storage, preparation, thawing, cooking, serving, refreezing and cold storage¹ (see separate sheet – Food Safety), extra precautions should be taken to avoid high risk foods.²⁻⁴ **Choose foods listed under the “Safer options” column.**

ATTACH THIS LIST TO YOUR FRIDGE AND/OR GIVE A COPY TO THE PERSON WHO IS PREPARING YOUR MEALS

Food Group	Safer options to choose	High risk foods to avoid
Breads, Cereals etc	<ul style="list-style-type: none"> All breads, bagels, rolls, muffins, pancakes, waffles, crackers Cooked rice, pasta and other grains All cereals, cooked or ready to eat Potato chips, pretzels, popcorn and other snack foods 	<ul style="list-style-type: none"> Uncooked biscuit dough or cake batter Un-refrigerated cream or custard filled baked goods Pre-prepared rice, couscous or pasta salads from delis or salad bars
Fruit	<ul style="list-style-type: none"> Well washed raw fruit (<i>fresh and in good condition</i>) Canned and frozen fruit Bottled and sealed fruit or vegetable juice Dried fruit 	<ul style="list-style-type: none"> Unwashed or poor quality raw fruits Rough-surfaced raw fruits (e.g. strawberry, raspberry) Pre-packaged and pre-cut fruit e.g. ½ serves of melons, diced fruit salads Commercial freshly squeezed fruit or vegetable juice
Vegetables	<ul style="list-style-type: none"> All cooked, frozen, canned or fresh vegetables Well washed raw vegetables & salad (<i>fresh and in good condition</i>) Fresh and well washed herbs. Cooked dried herbs and spices 	<ul style="list-style-type: none"> Unwashed raw vegetables or herbs Rough-surfaced raw vegetables (e.g. broccoli, cauliflower) All raw vegetable sprouts (alfalfa, mung beans etc) Freshly prepared fermented products (e.g. homemade kimchi or sauerkraut) Pre-packaged and pre-prepared salads from delicatessens, supermarkets or salad bars, and pre-cut vegetables e.g. ½ cut serves of pumpkin
Milk, yoghurt, cheese & alternatives	<ul style="list-style-type: none"> Fresh pasteurised milk, UHT milk, milk powder Yoghurt Pre-packaged processed/hard cheeses, cheese spread, cottage 	<ul style="list-style-type: none"> Unpasteurised milk, cheese, yoghurt (including homemade yoghurts) Cheese from delicatessens Soft, semisoft or surfaced ripened cheeses (pre-packaged and

<p>Milk, yoghurt, cheese & alternatives continued</p>	<p>cheese, cream cheese</p> <ul style="list-style-type: none"> • Ice-cream, frozen yoghurt, iceblocks • Custards, dairy desserts e.g. yogo, fruche 	<ul style="list-style-type: none"> • delicatessen) e.g. brie, camembert, gorgonzola, feta, blue vein, ricotta • Soft serve ice-cream, soft serve yoghurt and drinks containing these • Commercially prepared and unpackaged smoothies or thickshakes • Probiotic drinks/yoghurts unless recommended by your treating Doctor
<p>Meat, fish, poultry & alternatives</p>	<ul style="list-style-type: none"> • Commercial canned meats, poultry and fish • Well cooked meat and poultry (no pink meat or juices) • Freshly cooked seafood and fish • Well cooked eggs (no runny yolks) • Home cooked cold meats (store in fridge and use within one day of cooking) • Commercial canned or cooked legumes • Freshly cooked BBQ chicken that is eaten when hot • Shelf-stable bottled/canned pate, fish paste, liverwurst and meat spreads 	<ul style="list-style-type: none"> • Packaged/unpackaged ready-to-eat cold meats from supermarkets, deli counters, sandwich bars etc. • Raw/undercooked meat, fish, seafood, tofu, tempeh, miso products • Raw egg in drinks e.g. egg flips • Raw egg in desserts e.g. mousse, tiramisu, cheesecakes • Cold BBQ chicken from shops • Cold smoked fish (e.g. salmon, cod, trout) and pickled fish • Raw or ready-to-eat seafood (e.g. oysters, prawns, smoked mussels, sushi, sashimi) • Fresh pate, fish paste, liverwurst and meat spreads requiring refrigeration
<p>Beverages</p>	<ul style="list-style-type: none"> • All canned, bottled, powdered beverages e.g. soft drinks • Tap water – boiled or microfiltered • Packaged fruit juices • Coffee, tea bags, Ovaltine, Milo etc • Canned/packet soups • Commercial nutrition supplements - liquid and powdered e.g. Sustagen, Ensure Plus 	<ul style="list-style-type: none"> • Fermented beverages (e.g. kombucha) • Loose leaf teas • Water from a well, bore water or tank water. However if there are no other choices, filter and boil water before drinking. Make sure that the water is regularly tested for bacteria and found to be safe <p>• Bottled water is only considered safe if it has been appropriately treated⁵: ** Check if your preferred brand of water meets the standards on the International Bottled Water Association https://www.bottledwater.org/bottled-water-brands or contact the company directly.</p>
<p>Fats & oils</p>	<ul style="list-style-type: none"> • Butter, margarine, oil • Commercial, shelf-stable mayonnaise and salad dressings (refrigerated after opening) • Cooked gravy and sauces 	<ul style="list-style-type: none"> • Fresh salad dressings that contain aged cheese (e.g. blue cheese) • Mayonnaise/aioli made with raw egg
<p>Take Away Food</p>	<ul style="list-style-type: none"> • Choose foods that are freshly cooked/cooked to order and served steaming hot 	<ul style="list-style-type: none"> • Avoid food that is kept hot and not freshly cooked e.g. food in pie or food warmers/hot boxes/buffets • Avoid salads, sandwiches, sushi and rice paper rolls



Other

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| <ul style="list-style-type: none">• Sugar, jam, syrups (refrigerated)• Commercial (heat-treated) honey• Roasted/packageged nuts with shell removed• Commercially packaged peanut butter• Mustard, tomato sauce, soy sauce etc. (refrigerate after opening)• Pickles, relish, olives (refrigerated) | <ul style="list-style-type: none">• Any outdated products• Unpackaged dips• Leftovers greater than one day old• Raw or non-heat-treated honey, honey in the comb• Unpackaged raw nuts or any nuts in the shell• Probiotic capsules/powders unless recommended by your treating Doctor |
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For further information contact your Dietitian, or refer to the following:

- Food Standards Australia website <http://www.foodstandards.gov.au/Pages/default.aspx>
- Australian Food Safety Information Council <http://www.foodsafety.asn.au>
- Dietary Guidelines for Americans 2015-2020 Food Safety Principles and Guidance <https://www.vitamedica.com/wp-content/uploads/2016/02/2015-2020-Dietary-Guidelines.pdf>
- US Food Safety gateway website <http://www.foodsafety.gov>
- Eat For Health. Australian Dietary Guidelines <http://www.eatforhealth.gov.au>

References

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3. Moody, KM et al. A randomized trial of the effectiveness of the neutropenic diet versus food safety guidelines on infection rate in pediatric oncology patients [Internet]. [place unknown]: Cochrane Library; 2017 [cited 2018 Sept 10]. Available from: <https://www.cochranelibrary.com/central/doi/10.1002/central/CN-01426152/full?highlightAbstract=safety&highlightAbstract=safeti&highlightAbstract=food>
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