

The Oxalate Content of Food

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The oxalate content of food can vary considerably between plants of the same species, due to differences in climate, soil quality, state of ripeness, or even which part of the plant is analyzed. Variations also may be caused by the different methods used for measuring oxalate in food. Published values for some foods can vary from negligible amounts to moderately high. In addition, the soluble oxalate content of a food may influence the amount of oxalate absorbed by the intestine much more than the insoluble part, so foods that have a modest total oxalate content should still be limited because of the relatively high amount of soluble oxalate present.

In the tables below, the foods have been grouped according to their soluble and / or total oxalate content and the relative risk that they pose to those who need to limit dietary oxalate. In using these tables, it is very important to pay attention to the serving sizes listed. These food tables were compiled using the most up to date information available as of Feb 2003. They may be grouped differently to that of other oxalate food lists, because they are based on more recent data. If you have any questions relating to the dietary information posted here, please contact the registered dietitian at oxdietinfo@juno.com.

A low oxalate diet is usually defined as less than 50mg oxalate per day. However, dietary oxalate restrictions may vary depending on the underlying condition causing oxalosis. Please check with your health provider to determine the appropriate level of oxalate restriction for you.

VERY HIGH OXALATE (over 50mg per serving)

The following foods may contain very large amounts of oxalate in the range of 50 - 520mg oxalate per serving size listed.

Vegetables	Serving size	Soybeans and soy products	Serving size
Beetroot - boiled or pickled	¼ cup (50g)	Soy milk	¼ cup
Beet greens (Mangold)	1 oz (30g)	Soy burger	1 item (67g)
Leeks	½ cup (62g)	Textured vegetable/soy protein	1 oz
Okra	½ cup (100g)	Soy Flour	1 oz
Poke weed	1 oz (30g)	Soy nuts	¼ oz
Spinach	1 oz (30g)	Soy tofu	3 oz
Sweet potatoes	½ cup (120g)	Soy yogurt	½ cup
Swiss chard (boiled)	1 oz (30g)	Soy breakfast links	1 item (45g)
Swiss chard (raw)	¼ cup (9g)		
Fruits	Serving size	Legumes, Nuts and Seeds	Serving size
Elderberry, raw	3.5 oz (100g)	Almonds (slices)	⅛ cup (14g)
Figs, dried	3.5 oz (100g)	Hazel nut (chopped)	¼ cup (28g)
Green gooseberries	½ cup (75g)	Lentils, dried beans (cooked)	½ cup (85g)
Rhubarb, raw, canned or stewed	¼ cup (120g)	Refried beans (cooked)	¼ cup (42g)
Star fruit (Carambola)	1 oz (30g)	Peanuts	¼ cup (36g)
		Peanut butter	½ T (8g)
Grains and Starches	Serving size	Pecans (and other nuts)	¼ cup (28g)
Amaranth*	1 oz (30g)	Pistachio	½ cup (56g)
Buckwheat, dry	2 oz (60g)	Sesame seeds (and Tahini)	1 teaspoon (~2.5g)
Wheat bran, dry	1 oz (30g)		

*The oxalate content of Amaranth is unknown, but it is related to spinach and beets, and therefore probably

contains high levels of oxalate.

HIGH OXALATE (10-50mg per serving)

The following foods may contain large amounts of oxalate in the range of 10 - 50mg oxalate per serving.

Vegetables	Serving size	Fruits	Serving size
Baked beans in tomato sauce	1 cup (120g)	Blackberries	½ cup (72g)
Beans, green	½ cup (68g)	Black currants	½ cup (56g)
Beans, kidney	½ cup (120g)	Black raspberries	½ cup (60g)
Celery (raw)	½ cup (60g)	Blueberries	½ cup (73g)
Chicory, raw	½ cup (90g)	Currants, red	½ cup (56g)
Collard (boiled)	½ cup (64g)	Dewberries	½ cup (72g)
Dandelion greens (raw)	1 cup (55g)	Figs, raw	(3.5 oz) 100g
Dandelion greens (boiled)	1 cup (105g)	Fruit Cocktail	½ cup (125g)
Mustard greens, raw	½ cup (90g)	Gooseberry, red	(3.5 oz) 100g
Olives, green, canned	1 oz (7-8 small)	Gooseberry, mixed	(3.5 oz) 100g
Peppers, chilies, raw	½ cup (75g)	Grapes, concord	½ cup (80g)
Peppers, green, raw	½ cup (113g)	Kiwi, raw	1 med (76g)
Potatoes, raw	5 oz (150g)	Raspberries, red	½ cup (62g)
Potatoes , boiled	5 oz (150g)	Tamarillo	3.5 oz (100g)
Potatoes , baked	5 oz (150g)		
Potato, chips (small bag)	1 oz (30g)		
Potatoes, french fries	5 oz (150g)	Grains and Starches	Serving size
Rutabagas	½ cup (85g)	Breakfast cereals (bran/high fiber)	1 oz (30g)
Summer squash	½ cup (90g)	Rye or Wheat Crispbread	3.5 oz (100g)
Soy cheese	1 oz (30g)	Grits, white corn, dry	½ cup (75g)
Tempeh	3.5 oz (100g)	Grits, white corn, cooked	½ cup (120g)
		Wheat germ	1 Tbsp (7g)
		Whole-wheat flour	½ cup (60g)
Miscellaneous	Serving size		
Chocolate (Hershey bar)	1 oz (30g)	Beverages	Serving size
Chocolate (dark)	1 oz (30g)	Beer: dark, robust	12 fl oz (356g)
Chocolate (M & Ms)	1 oz (30g)	Coffee, instant	1 tsp (1.8g)
Cocoa, dry powder	1 Tbsp (5.4g)	Ovaltine™	1 tsp (2.67g)
Three Musketeers Bar	1 oz (30g)	Tea, black *	1 cup (240g)
Butterfingers Bar	1 item (45 gram)	Tea - rosehip	1 cup (240g)
Vegetable soup	1 cup (240g)		

* Published values for black tea range from 4 - 17mg per cup. Oxalate content also varies with the strength of tea. Limit to 8 fl. oz (1 cup) daily.

MODERATE OXALATE (2 - 10mg per serving)

The following foods contain moderate levels of oxalate. Note listed serving size.

Dairy/Meat/Fish	Serving size	Fruits/Juices	Serving size
Liver	4 oz (113g)	Apple, Granny Smith (or green)	1 med (140g)
Sardines	4 oz (113g)	Apple Sauce/Puree	4 oz (120g)
Yogurt, nonfat plain	1 cup (227g)	Apricots	2 med (70g)
		Bananas	1 med (114g)
Vegetables	Serving size	Huckleberry, dried (Bilberry)	3.5 oz (100g)
Artichoke	2 oz (60g)	Cherries, sweet	10 items (68g)
Asparagus	½ cup (90g)	Cranberry juice, pure	½ cup (126g)
Black Olives	1 oz (7-8 small)	Grape juice (red and green)	½ cup (126g)
Cabbage, red /savoy, raw, shredded	½ cup (35g)	Kumquat	3.5 oz (100g)
Carrots, raw	1oz (30g)	Lemon, raw	3.5 oz (100g)
Carrots, boiled	½ cup (73g)	Lemon, orange or lime peel	1 Tbsp (6g)
Carrot juice	3.5oz (100g)	Lime, raw	3.5 oz (100g)
Celeriac	3.5oz (100g)	Mandarin orange	3.5 oz (100g)
Egg plant, boiled	½ cup (48g)	Orange, raw	1 medium (136g)
Egg plant, raw	½ cup (41g)	Papaya	1 medium (300g)
Escarole, raw	1 cup (28g)	Peaches, Alberta	1 medium (87g)
Fennel (raw)	1 oz (30g)	Pears, raw	1 item (<200g)
Fennel (boiled)	3.5 oz (100g)	Pears, Bartlett, canned	½ cup (124g)
Kale (boiled)	½ cup (65g)	Pineapple, canned	½ cup (125g)
Lima Beans, canned	½ cup (124g)	Plum juice	½ cup (125g)
Linseed	3.5oz (100g)	Plums, purple	1 medium (66g)
Mushrooms, canned or raw	1 cup (70g)	Plums, Japanese	1 medium (66g)
Onions, boiled	½ cup (105g)	Plums, Syrian (Mirabelle)	1 medium (66g)
Parsnips, boiled	½ cup (78g)	Prunes	1 item (28g)
Parsley	1 Tbsp (4g)	Raisins	¼ cup (40g)
Peas, canned	3.5oz (100g)	Strawberries, canned †	½ cup (127g)
Salsify, canned	3.5oz (100g)	Strawberries, raw †	½ cup (75g)
Sauerkraut	3.5oz (100g)		
Split peas	½ cup (98g)		
Sweetcorn	½ cup (80g)		
Tomato juice	½ cup (120g)	Miscellaneous	Serving size
Tomato, canned, peeled	¼ cup (60g)	Cinnamon, ground	1 tsp (1.8g)
Tomato, raw	½ cup (120g)	Chicken noodle soup	1 cup (240g)
Watercress	1 cup (34g)	Ginger, raw	1 tsp (2g)
		Malt powder	1 Tbsp (12.3g)
Beverages	Serving size	Marmalade	1 Tbsp (20g)
Beer, draft (e.g. Budweiser)	12 fl oz	Thyme	1 tsp (2g)
Coffee, brewed **	1 cup (8 fl.oz)	Tomato soup	1 cup (244g)
Green Tea (1.75g per 1 cup water)	1 cup (8 fl.oz)	Pepper, black	1 tsp (2.1g)
Guinness draft beer	12 fl oz	Sunflower seeds	¼ cup (28g)
Hot chocolate	1 oz (30g)		
Matétea tea, green or roasted**	1 cup (8 fl.oz)		
Wine, Rosé	1 cup (8 fl.oz)		

** Oxalate content varies with the strength. Limit to 8 fl. Oz (1 cup) daily.

‡ Recent oxalate analysis of strawberries shows lower values than previously thought. Until more data confirms this, $\frac{1}{2}$ cup is the recommended serving size of strawberries.

MODERATE OXALATE (2 - 10mg per serving) continued:-

The following foods contain moderate levels of oxalate. Note listed serving size.

Grains and Starches	Serving size	Grains and Starches	Serving size
Bagels, plain	1 medium (55g)	Macaroni, boiled, soft	1 cup (140g)
Barley, cooked	1 cup (156g)	Oatmeal	1 cup (234g)
Bread, white	1 slice (30g)	Popcorn	2 cups (25g)
Bread, whole wheat	1 slice (30g)	Pretzels	1 oz (30g)
Cake, sponge	1 slice (66g)	White rice, cooked	1 cup (175g)
Cheerios™	1 cup (22.6g)	Spaghetti, boiled, soft	1 cup (140g)
Corn tortilla	1 medium (21g)	Spaghetti, canned in tomato sauce	1 cup (250g)
Corn meal, yellow, dry	1 cup (138g)	Ravioli	3.5 oz (100g)
English muffin, white	1 item (58g)	Rice, brown, cooked	$\frac{1}{2}$ cup (96g)
Flour, white	$\frac{1}{2}$ cup (60g)	Pop tart (cinnamon)	1 item (52g)

Scroll down for Low Oxalate Food Table

LOW OXALATE (0 - 2mg per serving)

The following foods contain little or no oxalate.

Dairy, Meat, and Fish	Vegetables	Fruits/Juices
Buttermilk	Avocado	Aloe vera juice
Milk - low-fat, skim, whole	Broccoli	Apples, red / juice
Bacon	Brussels sprouts	Apricots / nectar
Beef	Cauliflower	Avocados
Corned beef	Cabbage, green	Bilberries (raw)
Cheese	Chives, raw	Cherries , juice (bing, sour)
Eggs	Cucumber	Coconut (fresh)
Fish (except sardines)	Endive	Cranberries / juice
Ham	Fennel leaves	Granadilla (passion fruit)
Lamb	Kohlrabi	Grapefruit juice
Pork	Lettuce, all kinds	Grapes, (green, red)
Poultry	Onion, raw	Lemon juice
Shellfish	Peas, green (fresh /frozen)	Lime juice
	Radishes	Litchi (Lychee)
Fats and oils	Turnips	Mangoes
Butter and margarine	Water chestnuts, canned	Melons (all types)
Mayonnaise	Watercress	Nectarines
Salad dressings		Orange juice
Vegetable oil	Miscellaneous	Papaya
	Cornstarch	Peaches (canned)
Grains and Starches	Corn syrup	Peaches, Hiley or Stokes
Breakfast cereals (corn, rice)	Gelatin, unflavored	Pineapple juice
Chestnuts	Hard candy	Plums (green, yellow)
Fig Newton	Honey	Red Current Juice
Graham crackers	Jello and unflavored gelatin	
Macaroni	Preserves (with allowed fruit)	
Egg noodles (chow mein)	Maple syrup	Herbs (<2mg oxalate per tsp)
Wild rice, cooked	Mustard, all kinds	Basil
	Nutmeg, dry	Dill
Beverages	Oregano, dry	Lemon Balm
Apple cider	Soups (with allowed ingredients)	Peppermint
Beer, bottled	Sugar	Sage
Carbonated beverages-diet/regular	Tomato, ketchup 1T(15g)	Savory
Oolong tea	Vanilla extract, imitation	White Pepper
Lemonade/ limeade	Vinegar	
Wine (port, white)		
Herbal Teas including:		

Celestial Seasoning® - Sleepytime, Peppermint, Wild Forest Blackberry, Mandarin Orange Spice, Cinnamon, Apple Spice
R.C. Bigelow® - Cranberry Apple, Red Raspberry, I love Lemon, Orange and Spice, Mint Medley, Sweet Dreams
Thomas J. Lipton® - Gentle Orange, Lemon Soother, Chamomile Flowers.
Fennel Tea and Stinging Nettle Tea

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