

# 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](mailto: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.

<b>Vegetables</b>	<b>Serving size</b>	<b>Soybeans and soy products</b>	<b>Serving size</b>
Beetroot - boiled or pickled	$\frac{1}{4}$ cup (50g)	Soy milk	$\frac{1}{4}$ cup
Beet greens (Mangold)	1 oz (30g)	Soy burger	1 item (67g)
Leeks	$\frac{1}{2}$ cup (62g)	Textured vegetable/soy protein	1 oz
Okra	$\frac{1}{2}$ cup (100g)	Soy Flour	1 oz
Poke weed	1 oz (30g)	Soy nuts	$\frac{1}{4}$ oz
Spinach	1 oz (30g)	Soy tofu	3 oz
Sweet potatoes	$\frac{1}{2}$ cup (120g)	Soy yogurt	$\frac{1}{2}$ cup
Swiss chard (boiled)	1 oz (30g)	Soy breakfast links	1 item (45g)
Swiss chard (raw)	$\frac{1}{4}$ cup (9g)		
<b>Fruits</b>	<b>Serving size</b>	<b>Legumes, Nuts and Seeds</b>	<b>Serving size</b>
Elderberry, raw	3.5 oz (100g)	Almonds (slices)	$\frac{1}{8}$ cup (14g)
Figs, dried	3.5 oz (100g)	Hazel nut (chopped)	$\frac{1}{4}$ cup (28g)
Green gooseberries	$\frac{1}{2}$ cup (75g)	Lentils, dried beans (cooked)	$\frac{1}{2}$ cup (85g)
Rhubarb, raw, canned or stewed	$\frac{1}{4}$ cup (120g)	Refried beans (cooked)	$\frac{1}{4}$ cup (42g)
Star fruit (Carambola)	1 oz (30g)	Peanuts	$\frac{1}{4}$ cup (36g)
		Peanut butter	$\frac{1}{2}$ T (8g)
<b>Grains and Starches</b>	<b>Serving size</b>	Pecans (and other nuts)	$\frac{1}{4}$ cup (28g)
Amaranth*	1 oz (30g)	Pistachio	$\frac{1}{2}$ 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.

<b>Vegetables</b>	<b>Serving size</b>	<b>Fruits</b>	<b>Serving size</b>
Baked beans in tomato sauce	1 cup (120g)	Blackberries	$\frac{1}{2}$ cup (72g)
Beans, green	$\frac{1}{2}$ cup (68g)	Black currants	$\frac{1}{2}$ cup (56g)
Beans, kidney	$\frac{1}{2}$ cup (120g)	Black raspberries	$\frac{1}{2}$ cup (60g)
Celery (raw)	$\frac{1}{2}$ cup (60g)	Blueberries	$\frac{1}{2}$ cup (73g)
Chicory, raw	$\frac{1}{2}$ cup (90g)	Currants, red	$\frac{1}{2}$ cup (56g)
Collard (boiled)	$\frac{1}{2}$ cup (64g)	Dewberries	$\frac{1}{2}$ cup (72g)
Dandelion greens (raw)	1 cup (55g)	Figs, raw	(3.5 oz) 100g
Dandelion greens (boiled)	1 cup (105g)	Fruit Cocktail	$\frac{1}{2}$ cup (125g)
Mustard greens, raw	$\frac{1}{2}$ 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	$\frac{1}{2}$ cup (75g)	Grapes, concord	$\frac{1}{2}$ cup (80g)
Peppers, green, raw	$\frac{1}{2}$ cup (113g)	Kiwi, raw	1 med (76g)
Potatoes, raw	5 oz (150g)	Raspberries, red	$\frac{1}{2}$ 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)	<b>Grains and Starches</b>	<b>Serving size</b>
Rutabagas	$\frac{1}{2}$ cup (85g)	Breakfast cereals (bran/high fiber)	1 oz (30g)
Summer squash	$\frac{1}{2}$ cup (90g)	Rye or Wheat Crispbread	3.5 oz (100g)
Soy cheese	1 oz (30g)	Grits, white corn, dry	$\frac{1}{2}$ cup (75g)
Tempeh	3.5 oz (100g)	Grits, white corn, cooked	$\frac{1}{2}$ cup (120g)
		Wheat germ	1 Tbsp (7g)
		Whole-wheat flour	$\frac{1}{2}$ cup (60g)
<b>Miscellaneous</b>	<b>Serving size</b>		
Chocolate (Hershey bar)	1 oz (30g)	<b>Beverages</b>	<b>Serving size</b>
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 <sup>TM</sup>	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.

<b>Dairy/Meat/Fish</b>	<b>Serving size</b>	<b>Fruits/Juices</b>	<b>Serving size</b>
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)
<b>Vegetables</b>	<b>Serving size</b>	Huckleberry, dried (Bilberry)	3.5 oz (100g)
Artichoke	2 oz (60g)	Cherries, sweet	10 items (68g)
Asparagus	$\frac{1}{2}$ cup (90g)	Cranberry juice, pure	$\frac{1}{2}$ cup (126g)
Black Olives	1 oz ( 7-8 small)	Grape juice (red and green)	$\frac{1}{2}$ cup (126g)
Cabbage, red /savoy, raw, shredded	$\frac{1}{2}$ cup (35g)	Kumquat	3.5 oz (100g)
Carrots, raw	1oz (30g)	Lemon, raw	3.5 oz (100g)
Carrots, boiled	$\frac{1}{2}$ 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	$\frac{1}{2}$ cup (48g)	Orange, raw	1 medium (136g)
Egg plant, raw	$\frac{1}{2}$ 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	$\frac{1}{2}$ cup (124g)
Kale (boiled)	$\frac{1}{2}$ cup (65g)	Pineapple, canned	$\frac{1}{2}$ cup (125g)
Lima Beans, canned	$\frac{1}{2}$ cup (124g)	Plum juice	$\frac{1}{2}$ 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	$\frac{1}{2}$ cup (105g)	Plums, Syrian (Mirabelle)	1 medium (66g)
Parsnips, boiled	$\frac{1}{2}$ cup (78g)	Prunes	1 item (28g)
Parsley	1 Tbsp (4g)	Raisins	$\frac{1}{4}$ cup (40g)
Peas, canned	3.5oz (100g)	Strawberries, canned †	$\frac{1}{2}$ cup (127g)
Salsify, canned	3.5oz (100g)	Strawberries, raw †	$\frac{1}{2}$ cup (75g)
Sauerkraut	3.5oz (100g)		
Split peas	$\frac{1}{2}$ cup (98g)		
Sweetcorn	$\frac{1}{2}$ cup (80g)		
Tomato juice	$\frac{1}{2}$ cup (120g)	<b>Miscellaneous</b>	<b>Serving size</b>
Tomato, canned, peeled	$\frac{1}{4}$ cup (60g)	Cinnamon, ground	1 tsp (1.8g)
Tomato, raw	$\frac{1}{2}$ cup (120g)	Chicken noodle soup	1 cup (240g)
Watercress	1 cup (34g)	Ginger, raw	1 tsp (2g)
		Malt powder	1 Tbsp (12.3g)
<b>Beverages</b>	<b>Serving size</b>	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	$\frac{1}{4}$ 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.**