

VITAMIN K₁ (PHYLLOQUINONE) CONTENT OF COMMON FOODS

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References:

Booth SL, Madabushi HT, Davidson KW, *et al.* Tea and coffee brews are not dietary sources of vitamin K₁ (phylloquinone). *J Am Diet Assoc** 1995;95:82-83

Booth SL, Sadowski JA, Pennington JAT. Phylloquinone (Vitamin K₁) content of foods in the U.S. Food and Drug Administration's Total Diet Study. *J Agric Food Chem* 1995;43:1574-1579.

Booth SL, Sadowski JA, Weihrauch JL, Ferland G, Phylloquinone (Vitamin K₁) content of foods: A provisional table. *J Food Comp Anal* 1993;6:109-120.

Pennington JA, Church HN: *Food Values of Portions Commonly Used. 16th Edition.* J.P. Lippincott Company. 1994.

A. FRUITS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K ₁ Content (µg/100 gm) ‡
Apple Green peel	N/A	60*
Red peel	N/A	20*
Apple, red, raw	1 medium	1.8
Applesauce, bottled	½ cup	0.6
Apricot, raw	3 medium	3.3
Avocado, raw	1 small	14
Banana, raw	1 medium	0.2
Blueberries, canned	½ cup	6*
Cantaloupe, raw	2/3 cup	0.4
Cherries, sweet, raw	15 cherries	1.5
Cranberry sauce	1/3 cup	1*
Fruit cocktail, canned in heavy syrup	½ cup	2.6
Grapefruit, raw	½ medium	<0.01
Grapes, red/green. Seedless, raw	1 cup	8.3
Kiwi fruit	1 ¼ medium	25*
Lemon, fresh	2 medium	0.2*
Orange, raw	¾ medium	<0.01
Peach, raw	1 medium	2.1
Pear, canned in light syrup	½ cup	0.2
Pear, raw	¾ pear	4.9
Pineapple, canned in juice	1/3 cup pieces	0.3
Pineapple, fresh	½ cup, pieces	0.1*
Plums, raw	1 ½ medium	8.2
Prunes, dried	12 prunes	1.4
Pumpkin, canned	½ cup	16*
Raisins, dried	2/3 cup	1.7
Strawberries, raw	2/3 cup	1.5
Watermelon, raw	2/3 cup	0.2

† Calculated based on estimated portions to equal 100 gm. from Pennington JA, Church HN: *Food Values of Portions Commonly Used*. 16th Edition, J.P. Lippincott Company, 1994.

‡ Booth SL, Sadowski JA, Pennington JAT. Phylloquinone (Vitamin K₁) content of foods in the U.S. Food and Drug Administration's Total Diet Study. *J Agric Food Chem* 1995;43:1574-1579.

* Booth SL, Sadowski JA, Weihrauch JL, Ferland G. Vitamin K₁ [Phylloquinone] content of foods: A provisional table. *J Food Comp Anal* 1993;6:109-120

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N/A Not available

B. MILK & CHEESE

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Cheese, American processed	3.5 oz.	1.6
Cheese, cheddar	3.5 oz.	2.1
Cheese, cottage, 4% milk fat	3.5 round Tbsp.	0.4
Cheese, cream	7 Tbsp.	2.9
Cheese, Swiss	3.5 oz.	2.8
Cream, sour	8 Tbsp.	1*
Milk, Chocolate, fluid	3 fl. oz.	0.2
Milk, evaporated, canned	3 fl. oz.	1.6
Milk, low fat (2%) chocolate	3 fl. oz.	0.4*
Milk, low fat (2% fat). fluid	3 fl. oz.	0.2
Milk, skim. fluid	3 fl. oz.	0.01
Milk, whole (dry)	¾ cup	2*
Milk, whole, fluid	3 fl. oz.	0.3
Yogurt, fruit-flavored, low fat (fruit mixed in)	3.5 fl. oz	3.0
Yogurt, plain, low fat	3.5 fl. oz	0.1

C. EGGS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Eggs, boiled	2 (large)	0.3
Eggs, fried	2 (large)	6.9
Eggs, scrambled	2 (large)	12

D. NUTS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Nuts, mixed, no peanuts, dry roasted	3.5 oz.	13
Peanut butter, smooth	6 Tbsp.	0.3
Peanut, dry, roasted	3.5 oz.	0.3
Peanut, raw	3.5 oz.	0.2*
Pecan, dry	3.5 oz.	10*
Pistachio nut	3.5 oz.	70*

E. MEAT, POULTRY, AND FISH

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Abalone	3.5 oz	23*
Beef, chuck roast, baked	3.5 oz	0.7
Beef, ground, pan-cooked	3.5 oz	2.4
Beef, steak, loin, pan-cooked	3.5 oz	1.8
Bologna, sliced	4 slices	0.3
Bream, butterfly	3.5 oz	0.2*
Chicken breast, roasted	3.5 oz	<0.01
Chicken nuggets, fast food	5 nuggets	1.5
Chicken, fried (breast, leg, and thigh), fast food	1 piece	1.3
Chicken, fried (breast, leg, and thigh), homemade	1 piece	4.5
Clam	5 large	0.2*
Eel	3.5 oz	0.02*
Fish sticks, frozen, heated (1 stick = 4"x 2"x 1/2")	3.5 sticks	6.8
Frankfurters, beef, boiled	2 franks	1.8
Haddock, pan-cooked	3.5 oz	5.2
Ham luncheon meat, sliced	5 slices	<0.01
Ham, baked	3.5 oz	<0.01
Lamb chop, pan-cooked	3.5 oz	4.6
Liver, beef, fired	3.5 oz	2.7
Mackerel	3.5 oz	5*
Octopus	3.5 oz	0.07
Oyster	7 medium	0.1*
Pork bacon, pan-cooked	16 medium slices	0.1
Pork chop, pan-cooked	3.5 oz	3.1
Pork roast, baked	3.5 oz	<0.01
Pork sausage, pan-cooked	7 ½ links or 3 ½ patties	3.4
Prawn	3.5 oz	0.03*
Salami, sliced	4 slices	1.3
Salmon, pink	3.5 oz	0.4*
Sardines	3.5 oz	0.09*
Saury, Pacific	3.5 oz	0.02*
Shrimp, boiled	N/A	<0.01
Squid	3.5 oz	0.02*
Tuna, bluefin	3.5 oz	0.03*
Tuna, canned in oil, drained	3.5 oz	24
Turkey breast, roasted	3.5 oz	<0.01
Veal cutlet, pan-cooked	3.5 oz	6.6
Yellowtail, young	3.5 oz	0.08*

F. GRAIN PRODUCTS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Bagel, plain	2 bagels	0.4
Biscuit, from refrigerated dough, baked	3 ½ biscuits	4.6
Bread, corn homemade	1 piece	7.4
Bread, cracked wheat	4 slices	3.5
Bread, rye	4 slices	3.0
Bread, white	4 slices	1.9
Bread, white roll	3 ½ rolls	2.1
Bread, whole wheat	4 slices	3.4
Cereal, bran, raisin	3.5 oz	1.6
Cereal, Fruit-flavored, sweetened	3.5 oz	0.2
Cereal, granola	3.5 oz	1.8
Cereal, oat ring	3.5 oz	0.8
Cereal, shredded wheat	3.5 oz	1.5
Cereal, wheat, farina, quick (1-3 min.), cooked	½ cup	0.06
Cereal, crisped rice	3 ½. Cups	<0.01
Corn grits, regular, cooked	½ cup	<0.01
Cornflakes	3.5 oz	0.03
Crackers, graham	14 crackers	8.9
Crackers, saltine	33 crackers	3.6
Crackers, butter-type	28 crackers	13.1
Egg noodles, boiled	¾ cup	0.09
Flour Barley	N/A	1*
Buckwheat	¾ cup	7*
Rice	2/3 cup	0.04*
Wheat	¾ cup	0.6*
Macaroni, boiled	¾ cup	0.05
Muffin, blueberry, commercial	2 ½ muffins	25
Muffin, English, plain, toasted	2 muffins	0.3
Oatmeal, quick (1-3 min.) cooked	½ cup	0.4
Pancakes from mix	Three 4" pancakes	6.5
Rice cake	20 rice cakes	0.6*
Rice, white cooked	½ cup	<0.01
Sesame seed, dry	11 Tbsp.	8*
Spaghetti, dry	3.5 oz	0.02*
Tortilla, flour	3 tortillas	3.1

G. VEGETABLES

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K1 Content (µg/100 gm) ‡
Algae Green laver	3.5 oz	4*
Purple laver	3.5 oz	1385*
Konbu	N/A	66*
Hijiki	N/A	327*
Amaranth, raw leaf	N/A	1140*
Artichoke, globe	1/3 medium	14*
Asatsuki, leaf	N/A	190*
Ashitaba, leaf	N/A	590*
Asparagus, fresh/frozen, boiled	7 spears	80
Basella, raw leaf	N/A	160*
Beans, green, fresh/frozen, boiled	¾ cup	16
Beans, kidney, dry, boiled	½ cup	8.4
Beans, lima, immature, frozen, boiled	½ cup	5.1
Beans, pinto, dry, boiled	½ cup	3.7
Beets, fresh/frozen, boiled	½ cup	1.2
Bell tree dahlia Raw leaf	N/A	630*
Cooked leaf	N/A	1110*
Broccoli, fresh/frozen, boiled	½ cup	113
Brussels sprouts, fresh/frozen, boiled	5 sprouts	289
Cabbage, fresh, boiled	2/3 cup	98
Carrot, fresh, boiled	2/3 cup	15
Cauliflower, fresh/frozen, boiled	½ cup pieces	20
Celery, raw	2.5 stalks	32
Chard, Swiss, raw leaf	N/A	830*
Chingentsuai, raw green	N/A	120*
Chive, raw	33 Tbsp., chopped	190*
Chrysanthemum, garland	1 cup, pieces boiled	350*
Coleslaw with dressing, homemade	¾ cup	100
Collards, fresh/frozen, boiled	½ cup	440
Coriander, Raw leaf	6 ¼ cups	310*
Cooked leaf	N/A	1510*
Corn, cream style, canned	1/3 cup	0.03
Corn, fresh/frozen, boiled	2/3 cup	0.3
Cucumber, raw	1 cup slices	2.2
Eggplant, fresh, boiled	1 cup pieces	2.9
Endive, Raw	2 cups, chopped	231*
French Fries, fast food	20 pieces	4.4
French Fries, frozen, heated	3.5 oz	7.1
Fungi Shitake, raw	5 mushrooms	0*
Shimeji	N/A	0*
Nameko	N/A	0*
Kaiwaredaikon, raw leaf	N/A	80*

Kale, raw leaf	N/A	817*
Komatsuna, raw leaf	N/A	280*
Leek, raw	1 cup, chopped	14*
Lettuce Raw, heading and bib	N/A	122*
Red, leaf	N/A	210*
Lettuce, Iceberg, raw	5 leaves	31
Malabar gourd, raw leaf	N/A	22*
Mushrooms, raw	1 1/3 cup, pieces	0.06
Okra, fresh/frozen, boiled	1/2 cup, slices	40
Onion, green scallion, raw	2/3 cup, chopped	207*
Onion, mature, raw	2/3 cup, chopped	0.3
Osh, raw leaf	N/A	310*
Parsley Raw leaf	1 1/2 cups, chopped	540*
Cooked leaf	1 1/2 cups, chopped	900*
Parsnip	N/A	1*
Peas, green, fresh/frozen, boiled	1/2 cup	24
Peas, mature, dry, boiled	2/3 cup	5
Pepper, green, raw	1 cup, chopped	2.5
Perilla, raw leaf	N/A	650*
Potato, raw	1 potato	0.8*
Potato, white, baked with skin	1/2 potato	1.1
Potato, white, boiled without skin	2/3 potato	0.3
Potatoes, mashed, from flakes	1/2 cup	5.1
Potatoes, scalloped, homemade	1/2 cup	3.3
Purslane, raw	N/A	381*
Radish, raw	1 cup, slices	0.4
Rootish Raw leaf	N/A	290*
Cooked leaf	N/A	420*
Samat Raw leaf	N/A	350*
Cooked leaf	N/A	960*
Sauerkraut, canned	1/2 cup	13
Spinach, fresh/frozen, boiled	1/2 cup	360
Squash, summer, fresh/frozen, boiled	1/2 cup, slices	4.4
Squash, summer, peel only	N/A	80*
Squash, winter, fresh/frozen, baked, mashed	1/2 cup	1.1
Sweet potato, canned	1 cup	4*
Sweet potato, fresh, baked	1 potato	2.4
Tofu	1/2 cup	2*
Tomato sauce, plain, bottled	1/2 cup	2.9
Tomato, red, raw	1 tomato	3
Tomato, stewed, canned	1/2 cup	2.4
Toumyao (Chinese)	N/A	380*
Turnip, fresh/frozen, boiled	3.5 oz	0.07
Tziton, raw leaf	N/A	250*
Vegetables, mixed, frozen, boiled	1/2 cup	19
Watercress, raw	3 cups	250*

H. SNACKS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K1 Content (µg/100 gm) ‡
Chips, corn	3.5 oz	7.3
Chips, potato	3.5 oz	15
Popcorn, popped in oil	9 cups	20
Pretzel, hard, salted, any shape	3.5 oz	2.9

I. CONDIMENTS & SWEETENERS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K1 Content (µg/100 gm) ‡
Catsup, tomato	7 Tbsp	3.6
Honey	5 Tbsp	<0.01
Jelly, any flavor	5 Tbsp	12
Mustard, yellow	7 Tbsp	2.2
Olives, black	23 large	1.4
Pickles, dill cucumber	1.5 large (3 ¾" long, 1 ¼" diameter)	13
Pickles, sweet cucumber	3 large (3" long, ¾" diameter)	23
Sugar, white, granulated	½ cup	<0.01
Syrup, chocolate dessert topping	5 Tbsp	0.2
Syrup, pancake	5 Tbsp	<0.01

J. MIXED DISHES & MEALS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K1 Content (µg/100 gm) ‡
Beef chow mein, from Chinese carryout	1/3 cup	31
Beef stew w/potatoes, carrots, onion, homemade	1/3 cup	4.8
Beef stroganoff, homemade	3.5 oz	1.7
Cheeseburger, quarter-pound on bun, fast food	½ sandwich	4.1
Chicken pot pie, frozen, heated	3.5 oz	2.7
Chili con carne w/ beans, homemade	3.5 oz	4.7
Chowder, clam, New England, canned, condensed	1/3 cup	0.3
English muffin, egg, cheese, and ham, fast food	1 muffin	3.7
Fish sandwich on bun, fast food	2/3 sandwich	17
Frankfurter on bun, fast food	1 frankfurter	4.4
Hamburger, quarter-pound on bun, fast food	2/3 sandwich	3.8
Lasagna with meat, homemade	3.5 oz	5.3
Macaroni and cheese, from box mix	1/3 cup	5.3
Meatloaf, homemade	3.5 oz	12
Peppers, green, stuffed w/beef and rice, homemade	½ stuffed pepper	7.4
Pizza, cheese and pepperoni, regular crust, from carryout	1/8 of 12" pizza	3.8
Pizza, cheese, regular crust, from carryout	¼ of 12" pizza	4.2
Pork and Beans, canned	1/3 cup	1.1
Soup, bean with bacon/pork, canned, condensed	3.5 oz	0.9
Soup, chicken noodle, canned condensed	3.5 oz	0.1
Soup, mushroom, canned, condensed	3.5 oz	2.0
Soup, tomato, canned, condensed	3.5 oz	1.5
Soup, vegetable beef, canned, condensed	3.5 oz	0.6
Spaghetti with tomato sauce and meatballs, homemade	1/3 cup	5.7
Spaghetti with tomato sauce, canned	1/3 cup	0.7
Steak, Salisbury, Gravy, frozen meal	3.5 oz	2.3
Taco/tostada, from Mexican carryout	½ taco/tostada	16
Tuna noodle casserole, homemade	3.5 oz	20
Turkey with gravy, frozen meal	3.5 oz	5.3

K. FATS & DRESSINGS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K1 Content (µg/100 gm) ‡
Butter, regular [salted]	7 Tbsp	7.0
Cream substitute, frozen	3.5 fl. oz	5.7
Cream, sour	8 Tbsp	1
Gravy, brown, homemade	3.5 oz	0.3
Half and half	7 Tbsp	1.3
Margarine, stick, regular	7 Tbsp	33
Mayonnaise, regular, bottled	7 Tbsp	41
Oils		
Almond	7 Tbsp	7*
Canola [Rapeseed]	7 Tbsp	141*
Corn	7 Tbsp	3*
Olive/Safflower	7 Tbsp	28
Peanut	7 Tbsp	0.7*
Salad	7 Tbsp	148*
Sesame	7 Tbsp	10*
Soybean	7 Tbsp	193*
Sunflower	7 Tbsp	9*
Walnut	7 Tbsp	15*
Salad dressing, French, regular	7 Tbsp	51
Salad dressing, Italian, low calorie	7 Tbsp	2.9
Sauce, white, homemade	3.5 oz	6.9

L. DESSERTS

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K₁ Content (µg/100 gm) ‡
Brownies, commercial	5 brownies (3x1x7/8")	14
Cake doughnuts w/ icing, any flavor	3 doughnuts	9.8
Cake, chocolate, w/ chocolate icing, commercial	2 pieces	13
Cake, snack, chocolate, w/ chocolate icing	3.5 oz	5.7
Cake, yellow, w/ white icing	1 piece	8.5
Candy bar, milk chocolate, plain	3.5 oz	0.4
Candy, caramel	13 pieces	1.7
Cookies, chocolate chip, commercial	8 cookies	10
Cookies, sandwich w/ crème filling, commercial	10 cookies	8.7
Cookies, sugar, commercial	6 cookies	11
Danish, sweet roll/, commercial	2 rolls	11
Gelatin dessert, any flavor	1/3 cup	0.02
Ice cream, vanilla	¾ cup	0.3
Milkshake, chocolate, fast food	3.5 fl oz	0.2
Pie, apple, fresh/frozen, commercial	1/8 pie	11
Pie, pumpkin, fresh/frozen, commercial	1/8 pie	10
Popsicle, any flavor	3.5 fl oz bar	<0.01
Pudding, chocolate, from instant mix	1/3 cup	0.4
Sherbet, fruit flavor	½ cup	0.3
Suckers, any flavor	17 lollipops	<0.01

M. BEVERAGES

Food Name	Estimated Portion Size Equivalent to 100 grams †	Mean Vitamin K ₁ Content (µg/100 gm) ‡
Beer	3.5 fl oz	<0.01
Coffee, decaffeinated, from instant	3.5 fl oz	0.02
Coffee, from ground beans	3.5 fl oz	<0.01
Cola, carbonated beverage	3.5 fl oz	0.02
Cola, low-calorie, carbonated beverage	3.5 fl oz	<0.01
Fruit drink, canned	3.0 fl oz	0.02
Fruit drink, from powder	3.5 fl oz	<0.01
Ginger ale Regular	3.5 fl oz	0.01*
Diet	3.5 fl oz	<0.005*
Juice, apple, bottled	3.0 fl oz	<0.01
Juice, cranberry	3.0 fl oz	0.005*
Juice, grape, from frozen concentrate	3.0 fl oz	0.4
Juice, grapefruit, from frozen concentrate	3.0 fl oz	0.05
Juice, Orange, from frozen concentrate	3.0 fl oz	<0.01
Juice, pineapple, from frozen concentrate	3.0 fl oz	0.3
Juice, prune, bottled	3.0 fl oz	3.4
Juice, tomato, bottled	3.5 fl oz	2.3
Lemonade, from frozen concentrate	3.5 fl oz	0.06
Martini	3.5 fl oz	<0.01
Sake	3.5 fl oz	<0.005*
Soy milk	3.5 fl oz	3*
Tea from tea bag	3.5 fl oz	0.08
Black, brewed	3.5 fl oz	0.05*
Black, leaves [dry]	N/A	262*
Decaffeinated, brewed	3.5 fl oz	0.03*
Green, leaves [dry]	N/A	1428*
Green, leaves, brewed	3.5 fl oz	0.03#
Water, tap	3.5 fl oz	<0.01
Whiskey	3.5 fl oz	<0.01
Wine, dry, table	3.5 fl oz	<0.01

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