

Electronic supplementary material (ESM 2)

Table E2. The concentration of selenium, including losses on cooking, by dietary item

Name of product	Selenium content in micrograms per 100g	Reference
Cereal products and milk		
Cornflakes	2.6	(1)
Milk and milk drinks	1.7	(2)
Breadstuff		
White bread (rye, wheat)	2.8	(3)
Brown bread (wholemeal bread, graham bread)	4.5	(3)
Rolls (rye, wheat)	3.5	(3)
Brown rolls (i.e., graham rolls)	3.9	(3)
Other baker's goods (i.e., French baguettes)	27.1	(4)
Spreadable fat products		
Butter	1.2	(2)
Margarine	5.3	(5,6)
Vegetable butter	3.3	(5,6)
Cheeses and other bread additives		
Cheese fresh	4.5	(1)
Cream cheese	2.5	(7,8)
Processed cheese	2.0	(8)
Cheese (i.e. Gouda, Edam, Emmentaler or other cheeses)	3.0	(7,8)
Blue cheeses (Camembert, Brie or other cheeses of this type)	5.8	(1)
Marmalade, jams, jellies	10.7	(1,5,8,9,10)*
Honey	10.2	(5,6)
Cold meats and fishes		
Ham, loin, ham sausage, poultry ham, and poultry loin	7.2	(5,6)
Salami and other dried sausages	6.3	(5,8)
Sausage, i.e., 'toruńska' sausage; 'litewska' sausage; bacon (except for sausage intended for boiling)	9.8	(5)
Brawn, liver sausage, jellied cold meats	18.2	(5)

Rollmop, herrings in oil, fishes in tomato sauce	14.6	(11)
Dairy products and eggs		
Yogurt, kefir (kind of buttermilk), sour milk	2.4	(1,2,12)
Soft-boiled eggs, hard-boiled eggs	19.9	(9)
Fried eggs, eggs fried in an omelet	12.4	(2)**
Fresh fruits summer/autumn		
Apple	0.3	(1,8,9)
Pear	0.6	(10)
Peach, nectarine	0.4	(1,13)
Cherries, mirabelle plums, plums	0.3	(8,14)
Grapes	1.3	(10)
Strawberries	0.7	(1)
Other berry fruits (currants, raspberries, blackberries, bilberries)	4.1	(13)
Bananas	0.6	(14)
Kiwi fruit	0.6	(14)
Fresh fruits winter/spring		
Apples	0.3	(1,8,9)
Oranges, grapefruits	0.5	(1,8,10)
Bananas	0.6	(14)
Tangerines, kiwi fruit	0.6	(14)
Frozen strawberries	0.7	(1,15)
Beef and Pork		
beefsteak beef stew	5.2	(9,14,16)
Roast beef	6.2	(1)
Boiled beef	5.5	(9,16)
Pork (pork chops, roast pork, stew)	11.4	(9,16)
Pork veal	4.4	(2,16,17,18,19)
Meat and poultry		
Chopped meat, minced meat, schnitzel (roasted paupiette, hamburger, meatball)	11.4	(9,16)
Liver (pork liver, poultry liver)	54.2	(1,2,16)
Other organ meats (kidneys, hearts, tripe, lungs)	26.1	(16,20)
Rabbit	10.4	(16,21)
Roasted chicken(chicken fillets)	11.0	(7,16)

Other poultry (chicken leg, duck, turkey)	12.5	(7,16)
Mutton	12.7	(16,22,23)
Sausages		
Grilled sausage	7.2	(6,16)
Weenies, franks, boiled Frankfurter sausage	14.7	(6,16)
Fish dishes		
Fish (fish fillet, fish sticks)	12.2	(16,24)
A method of preparing meat and fishes		
Butter	1.2	(2)
Margarine (margarines such as 'Benevita', 'Apetyczna', 'Marcysia', 'Ekstra Pomorski')	5.3	(5)
Vegetable fat ('Benevita' margarine)	3.3	(5)
Animal fat (lard, backfat)	6.9	(25)
Olive oil, vegetable oil	0.1	(26)
Salads		
Lettuce	2.4	(2,7)
Mixed salad (cucumbers, tomatoes, pepper)	0.2	(2,7,13)*
Cucumber salad	5.0	(2,7)*
Carrot salad	2.9	(1,2,7,8,9)*
Cabbage salad (but not pickled cabbage)	4.9	(2,7,26,27)*
Radish salad	4.1	(1,2,7,27)*
Pepper	1.1	(7)
Raw tomatoes	1.5	(7)
Chive, onion	1.7	(2,7,27)
Salad additives		
Olive oil	0.1	(26)
Other types of oil (i.e., soybean oil)	0.8	(10)
Cream	1.5	(7)
mayonnaise	4.6	(5,9,26,28)*
Vinegar	<0.1	(28)
Lemon juice	0.7	(29)
Onion (raw)	1.7	(2,7,27)
Fresh culinary herbs (thyme, coriander, basil, oregano, rosemary, parsley)	1.9	(2,30)
Cooked vegetables		
Boiled white and red cabbage	3.8	(2,3,7,27)**
Cauliflower	6.6	(2,5,31)**
Brussels sprouts	8.1	(2,5,31)**

Boiled spinach	1.2	(2,3,24,32)**
Boiled carrot	2.0	(2,3)**
Cooked beet and other cooked vegetables (i.e., cooked celery)	0.6	(3,5,33,34)**
Vegetable salad consists of cooked vegetables	2.7	(2,5,7,9,13,18,26,27,33)**
Green bean, green peas	16.0	(2,18,31)**
Pickled/Marinated vegetables		
Sauerkraut	1.8	(33,35,36)
Mushroom dishes	3.9	(2)***
Pickled cucumbers and other pickled vegetables (i.e., onion, pepper)	0.9	(33)
Potatoes and dumplings		
Boiled potatoes	0.2	(13,23)***
Mashed potatoes	0.3	(2,7,13,23,27)**
Fried potatoes, french fries, baked potatoes	0.3	(13,23)***
Potato dumplings	0.3	(2,3,7,13,23,27)**
Dishes of flour		
Pasta	7.9	(3)***
Rice	7.0	(1,37)
Kasha, corn	3.2	(1)***
Other dishes		
Pizza	3.3	(1,2,3,6,7,26,27,38,39)**
Potato cakes	1.0	(2,3,7,13,26,27)**
Pancakes, croquettes	5.7	(2,3,7,27)**
Desserts		
Canned fruits (from compote) (pineapple, peach)	0.4	(40)
Cakes		
Layer cake (chocolate torte)	5.8	(2,3,5,7,8,10,41,42,43,44,45,46)*
Fruit pie	7.5	(1,2,3,6)*
Whipped cream	1.3	(47)
Candies and snacks		
Chocolate	0.4	(41)
Chocolate bars	0.4	(48)
Cookies (tea cakes), biscuits	0.4	(48)
Chocolates (i.e., with vodka or other small chocolates)	0.3	(48)
Ice cream	10.0	(49)
Chips, salty sticks, crackers	0.4	(48)

Nuts (i.e., peanuts, hazelnuts)	9.5	(14)
Coffee and tea		
Coffee	0.1	(8)
Decaf	0.1	(50,51)
Chicory coffee	3.5	(52)
Black tea	0.1	(8)
Refreshing drinks		
Mineral water, spring water	0.1	(41,53)
Fruit juices	0.1	(54)
Multivitamin juice	0.1	(29)
Lemonade, orangeade	0.3	(8,55)
Coca-cola, Pepsi-cola	0.3	(41)
Spirits		
Beer	0.6	(53,56)
Wine	0.1	(2,53,57)
Fruit wine	0.2	(2)
Champagne, sparkling wine	0.2	(58)
Vodka, whisky, cognac, rum	0.0	(42)

* standard recipe (references no 59, 60, 62), selenium content for ingredients,

**standard recipe (references no 59, 61), selenium content for ingredients included losses of selenium due to various cooking practices

***selenium content in single food additives (mushroom, potatoes, pasta) added to main dishes included losses of selenium due to heat treatment

reference no 16 - selenium losses in foods and dishes due to different cooking practices (boiling, canning, frying, grilling)

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