

Table 14-5. Concentration (mg/kg) of food additives by food category for older adults (over-64 year olds).

For undetected samples, the detection limit or the determination limit was applied in estimation.

	: Detection limit is used.
*	: Quantitation limit is used.

Compound	Group A/B *	Over-64 year olds							Maximum intake
		I. Seasonings and beverages	II. Cereals	III. Potatoes, legumes and nuts	IV. Fish/shellfish and meat	V. Fats/oils and milk/milk products	VI. Sugar and confections/savories	VII. Fruits, vegetables, and seaweeds	
Food Intake (g)		136.66	250.44	159.95	192.19	123.08	32.20	471.26	
Aspartame	A	0.13666	0.25044	0.15995	0.19219	0.12308	1.7	0.47126	3.03
Xylitol	B	1.3666	2.5044	1.5995	1.9219	1.2308	0.322	4.7126	13.7
Glycyrrhizine	B	0.1803912	0.012522	0.0911715	* 0.0096095	0.006154	0.00161	* 0.023563	0.325
Sodium saccharin	A	0.013666	0.050088	0.03199	0.29	0.024616	0.00644	0.44	0.857
D-Sorbitol	B	25.9654	47.5836	81.5745	257.5346	1.2308	207.368	311.0316	932
D-Mannitol	B	28.6986	395.6952	119.9625	5.7657	1.2308	3.864	183.7914	739
Amaranth	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Erythrosine	A	0.00027332	0.0005009	0.0003199	0.00172971	0.00024616	0.0000644	0.00094252	0.00408
Allura red AC	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
New cocine	A	0.00027332	0.0005009	0.0003199	0.00057657	0.00024616	0.0000966	0.00424134	0.00625
Phloxine	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Rose bengale	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Acid red	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0001288	0.00094252	0.0028
Tartrazine	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0008372	0.00094252	0.0035
Sunset yellow FCF	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.000161	0.00094252	0.00283
Fast green FCF	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Brilliant blue FCF	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Indigo carmine	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Titanium dioxide	B	0.13666	0.25044	0.15995	0.19219	0.12308	0.0322	0.47126	1.37
β -Carotene	B	0.287441533	0.0075132	0.0047985	0.0096095	0.009436133	0.006976667	1.8756148	2.2
Norbixine	A	0.06833	0.12522	0.079975	0.096095	0.06154	0.0161	0.23563	0.682
Sulfurous acid	B	0.006833	0.25044	0.15995	0.19219	0.06154	0.0322	0.47126	1.17
Benzoic acid	A	0.378639307	0.0430757	0.0889322	0.04939283	0.25686796	0.0151662	0.061106713	0.893
Sorbic acid	A	0.006833	0.81	1.55	7.04	0.006154	0.97	1.57	12
Dehydroacetic acid	A	0.020499	0.020499	0.037566	0.0239925	0.018462	0.00483	0.023563	0.149
Isobutyl <i>p</i> -hydroxybenzoate	A	0.006833	0.006833	0.025044	0.015995	0.006154	0.00322	0.070689	0.134
Isopropyl <i>p</i> -hydroxybenzoate	A	0.006833	0.006833	0.025044	0.015995	0.006154	0.00322	0.047126	0.111
Ethyl <i>p</i> -hydroxybenzoate	A	0.040998	0.006833	0.025044	0.015995	0.006154	0.00322	0.047126	0.145
Butyl <i>p</i> -hydroxybenzoate	A	0.150326	0.006833	0.025044	0.015995	0.006154	0.00322	0.047126	0.255
Propyl <i>p</i> -hydroxybenzoate	A	0.006833	0.006833	0.025044	0.015995	0.006154	0.00322	0.047126	0.111
Propionic acid	B	0.532974	0.50088	0.389211667	0.896886667	0.12308	0.0644	0.94252	3.45
EDTA	A	0.06833	0.25044	0.15995	0.19219	0.12308	0.0322	0.47126	1.3
Erythorbic acid	A	0.013666	0.025044	0.015995	0.076876	0.012308	0.00322	0.047126	0.194
Isopropyl citrate	A	0.06833	0.12522	0.079975	0.096095	0.06154	0.0161	0.23563	0.683

Compound	Group A/B *	Over-64 year olds							Maximum intake
		I. Seasonings and beverages	II. Cereals	III. Potatoes, legumes and nuts	IV. Fish/shellfish and meat	V. Fats/oils and milk/milk products	VI. Sugar and confections/savories	VII. Fruits, vegetables, and seaweeds	
L-Cysteine hydrochloride	B	25.2821	3.25572	25.11215	4.5	2.21544	0.10304	20.5	81
Butylated hydroxytoluene (BHT)	A	0.0034165	* 0.025044	* 0.015995	* 0.019219	0.003077	* 0.00322	* 0.047126	0.117
d- α -Tocopherol	B	1.250439	0.6035604	0.4078725	1.3241891	1.883124	0.64078	0.5560868	6.67
d- β -Tocopherol	B	0.0218656	0.0801408	0.115164	0.019219	0.0455396	0.00644	0.0047126	0.293
d- γ -Tocopherol	B	0.3361836	0.425748	3.35895	0.2363937	3.003152	0.269192	0.0518386	7.68
d- δ -Tocopherol	B	0.1188942	0.150264	1.66348	0.0903293	0.301546	0.140714	0.0047126	2.47
Butylated hydroxyanisole (BHA)	A	0.0034165	0.012522	0.0079975	0.0096095	0.003077	0.00161	0.023563	0.0618
Propyl gallate	A	0.06833	0.25044	0.15995	0.19219	0.06154	0.0322	0.47126	1.24
Nitrite	B	0.13666	0.012522	0.35189	0.0096095	0.006154	0.00161	0.023563	0.542
Nitrate	B	1.3666	0.400704	1.231615	0.307504	0.3077	0.21574	248.82528	252
Imazaryl	A	0.00013666	0.0005009	0.0003199	0.00038438	0.00012308	0.0000644	0.00094252	0.00247
<i>o</i> -Phenylphenol (OPP)	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Diphenyl	A	0.00027332	0.0005009	0.0003199	0.00038438	0.00024616	0.0000644	0.00094252	0.00273
Thiabendazole	A	0.000027332	0.0001002	0.00006398	0.000076876	0.000024616	0.00001288	0.000895	0.0012
L-Aspartic acid	B	100.71842	29.30148	77.7357	39.39895	1.60004	2.576	100.84964	352
DL-Alanine	B	161.2588	5.7	45.58575	175.27728	1.9	1.2558	132.89532	524
Disodium 5'-inosinate	B	22.95888	0.100176	0.06398	0.365161	0.024616	0.01288	0.188504	23.7
Disodium 5'-uridylylate	B	0.860958	0.100176	0.06398	0.076876	0.036924	0.01288	0	1.15
Disodium 5'-guanylylate	B	2.432548	0.100176	0.06398	0.076876	0.024616	0.0322	0	2.73
Glycine	B	61.63366	13.27332	19.35395	132.03453	0.36924	1.8354	41.7	270
L-Glutamic acid	B	1040	42.07392	164.7485	199.8776	1.8462	7.5026	181.4351	1637
Disodium 5'-cytidylate	B	0.027332	0.100176	0.06398	0.076876	0.024616	0.01288	0.188504	0.494
L-Theanine	B	20.22568	* 0.50088	2.07935	0.96095	0.06154	0.0322	1.2	25.1
L-Isoleucine	B	90.74224	0.7	35.98875	44.2037	0.73848	* 0.0644	34.2	207
L-Tryptophan	B	3.2	1.75308	17.11465	1.1	0.3	0.2254	4.9	28.6
L-Threonine	B	72.4298	1.50264	31.6701	3	0.6154	0.161	40.9	150
L-Valine	B	99.7618	2.4	49.5845	64.57584	3.20008	0.161	55.13742	275
L-Histidine hydrochloride	B	40.72468	2.25396	24.15245	242.1594	0.7	0.0644	40	350
L-Phenylalanine	B	88.69234	6.76188	71.6576	57.08043	1.10772	0.3542	46.18348	272
DL-Methionine	B	23.77884	2.4	21.4333	40.55209	0.6154	0.0322	7.9	96.7
L-Lysine hydrochloride	B	97.43858	5.6	92.771	57.08043	2.9	0.0644	63.6201	319
L-Ascorbic acid	B	13.93932	0.150264	9.165135	4.497246	0.578476	2.8819	68.80396	100
L-Ascorbyl stearate	A	0.054664	0.100176	0.06398	0.076876	0.049232	0.01288	0.188504	0.546
L-Ascorbyl palmitate	A	0.054664	0.100176	0.06398	0.076876	0.049232	0.01288	0.188504	0.546
Thiamine hydrochloride	B	0.1011284	0.2178828	0.12796	0.0057657	0.0393856	0.00644	0.2167796	0.715
Riboflavin	B	0.163992	0.0851496	0.195139	0.4497246	0.2178516	0.014812	0.188504	1.32
Glycerol	B	485.5985333	123.5504	143.955	45.48496667	* 12.308	12.12866667	95.82286667	919
Silicone resin	A	0.13666	0.25044	0.47985	0.15995	0.12308	0.644	9.4252	11.2
Propylene glycol	A	2.7332	11.52024	* 1.5995	0.3199	* 1.2308	0.4508	0.94252	18.8
Adipic acid	B	0.06833	0.25044	0.079975	0.096095	0.06154	0.0161	1.798642333	2.37
Citric acid	B	1010.372933	5.0088	518.7711667	* 1.5995	136.2085333	20.39333333	497.9647333	2190

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Gluconic acid	B	29.56210899	5.5280456	11.62084735	8.023996563	0.745167347	2.639970667	21.7557179	79.9
Succinic acid	B	232.322	5.0088	4.7985	19.219	1.2308	0.322	4.7126	268
L-Tartaric acid	B	1.3666	* 5.0088	1.5995	31.39103333	34.87266667	8.586666667	4.7126	87.5
Lactic acid	B	214.1006667	594.3776	242.0576667	894.3241333	247.3908	3.005333333	410	2605
Acetic acid	B	258.1962933	172.72012	97.99603333	109.6123633	18.462	3.22	123.7842933	784
Fumaric acid	B	1.958793333	0	3.412266667	1.15314	1.10772	0.729866667	30.78898667	39.2
DL-Malic acid	B	865.0578	46.7488	171.1465	41.64116667	1.2308	27.692	571.7954667	1725
Calcium	B	19.6	36.36	103.18	91.46	138.96	8.19	99.67	497
Orthophosphoric acid	A	138.0266	275.484	223.93	634.227	196.928	8.694	329.882	1807
Aluminum	B	1.620332067	0.5409504	0.25592	0.806557367	0.0529244	0.715806	3.988430467	7.98
Iron	B	0.930199067	0.947498	1.859685333	2.1121681	0.066873467	0.335738667	2.7992844	9.05
Magnesium	B	38.35	61.81	82.63	55.31	12.87	3.81	75.73	331
Nordihydroguaiaretic acid	B	0.06833	0.25044	0.15995	0.19219	0.12308	0.0322	0.47126	1.3
Naringin	B	* 1.3666	1.2522	0.79975	0.96095	0.6154	0.161	2.3563	7.51
Hesperidine	B	* 1.3666	1.2522	0.79975	0.96095	0.6154	0.161	22.3259425	27.5
Kojic acid	B	0.06833	0.12522	0.079975	0.096095	0.06154	0.0161	0.23563	0.682
L-Asparagine	B	2.7332	2.1	136.2774	0.38438	* 0.12308	0.0644	136.19414	278
L-Glutamine	B	5.4664	1.9	99.96875	1.6	0.12308	0.0644	584.3624	693
L-Arginine	B	100.03512	8.7654	103.3277	0.9	* 0.12308	0.8372	140.90674	355
L-Cystine	B	0.06833	0.25044	0.9597	0.19219	0.06154	* 0.0644	2	3.6
L-Serine	B	103.31496	5.0088	49.42455	2.30628	0.49232	0.6762	70.21774	231
L-Hydroxyproline	B	0.81996	0.50088	0.3199	2.4	0.3	0.07084	0.94252	5.35
L-Tyrosine	B	21.8656	6.4	55.18275	4.3	1.60004	0.0966	22.5	112
L-Proline	B	105.50152	3.25572	37.4283	14.5	2.95392	1.288	82.94176	248
L-Leucine	B	144.8596	11.52024	83.01405	100.32318	4.3078	0.1932	66.44766	411

* Group A/B: Food additives in Group A do not from naturally occur and those in Group B do.