

Supplemental material

Macronutrient intake and inadequacies in community-dwelling older adults, a systematic review

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S1 Pubmed search string

(elderly[TIAB] OR geriatric[TIAB] OR older adults[TIAB] OR older people[TIAB] OR senior[TIAB] OR older person[TIAB] OR aging[TIAB]) AND (nutritional status[TIAB] OR (nutrient deficiencies[TIAB] OR nutrient deficiency[TIAB] OR nutrient deficient[TIAB]) OR nutrient intake[TIAB] OR nutritional intake[TIAB] OR food intake[TIAB] OR dietary intake[TIAB] OR dietary adequacy[TIAB] OR nutrition assessment[TIAB] OR "diet records"[MeSH Terms]) AND (population-based study[TIAB] OR longitudinal study[TIAB] OR epidemiologic study[TIAB] OR cohort study[TIAB] OR prospective study[TIAB] OR cross-sectional study[TIAB] OR population-based design[TIAB] OR longitudinal design[TIAB] OR epidemiologic design[TIAB] OR cohort design[TIAB] OR prospective design[TIAB] OR cross-sectional design[TIAB]) AND "humans"[MeSH Terms]

Table S2 Quality assessment based on the Newcastle-Ottawa quality assessment scale [1] and the Cochrane coding manual for cohort studies [2]

| Reference | Selection bias | | Outcome bias | | Quality |
|---------------------------------------|------------------------|------------------------------------|-------------------------------|----------------------------------|----------|
| | Predefined population* | In/Exclusion criteria [†] | Validated method [‡] | Selective reporting [§] | |
| Adamson <i>et al.</i> 2009 [3] | 1 | 0 | 2 | 1 | moderate |
| Alstad <i>et al.</i> 1999 [4] | 1 | 0 | 1 | 0 | low |
| Becker <i>et al.</i> 2002 [5] | 1 | 0 | 1 | 0 | low |
| Boilson <i>et al.</i> 2012 [6] | 1 | 0 | 1 | 0 | moderate |
| Castetbon <i>et al.</i> 2009 [7] | 1 | 1 | 1 | 0 | moderate |
| Correa Leite <i>et al.</i> 2003 [8] | 1 | 0 | 1 | 0 | low |
| Elmadfa <i>et al.</i> 2009 [9] | 1 | 1 | 1 | 0 | moderate |
| Elmadfa <i>et al.</i> 2009 [10] | n.a. | n.a. | n.a. | n.a. | n.a. |
| Feart <i>et al.</i> 2012 [11] | 1 | 1 | 1 | 1 | moderate |
| Fidanza <i>et al.</i> 1984 [12] | 1 | 0 | 1 | 1 | moderate |
| Finch <i>et al.</i> 1998 [13] | 1 | 1 | 1 | 0 | moderate |
| Gaudreau <i>et al.</i> 2007 [14] | 1 | 1 | 2 | 1 | high |
| Gibson 2001 [15] | 1 | 0 | 1 | 1 | moderate |
| Gray-Donald <i>et al.</i> 1994 [16] | 0 | 0 | 1 | 1 | low |
| Griep <i>et al.</i> 1996 [17] | 0 | 1 | 2 | 1 | moderate |
| Health Canada <i>et al.</i> [18] | 1 | 1 | 2 | 1 | high |
| Horwath <i>et al.</i> 1992 [19] | 1 | 1 | 2 | 1 | high |
| Hulshof <i>et al.</i> 1991 [20] | 1 | 1 | 1 | 0 | moderate |
| Johansson <i>et al.</i> 1999 [21] | 1 | 0 | 2 | 0 | moderate |
| Konstantinova <i>et al.</i> 2008 [22] | 1 | 0 | 2 | 1 | moderate |
| Leclercq <i>et al.</i> 2009 [23] | 1 | 1 | 1 | 1 | moderate |
| Lopes <i>et al.</i> 2006 [24] | 1 | 1 | 2 | 0 | moderate |
| Luhrmann <i>et al.</i> 2001 [25] | 1 | 1 | 2 | 1 | high |
| Martins <i>et al.</i> 2002 [26] | 1 | 0 | 0 | 1 | low |
| Max Rubner-Institut 2008 [27] | 1 | 1 | 1 | 0 | moderate |
| Milman <i>et al.</i> 2004 [28] | 1 | 1 | 2 | 1 | high |
| Moreiras <i>et al.</i> 1996 [29] | 1 | 0 | 2 | 0 | moderate |
| Mowe <i>et al.</i> 1994 [30] | 0 | 1 | 1 | 1 | moderate |
| NCSR <i>et al.</i> 2011 [31] | 1 | 1 | 1 | 0 | moderate |
| Nelson <i>et al.</i> 2009 [32] | 1 | 1 | 2 | 1 | high |
| Nicolas <i>et al.</i> 2001 [33] | 0 | 1 | 1 | 1 | moderate |

| | | | | | |
|--------------------------------------|---|---|---|---|----------|
| Ocke <i>et al.</i> 2013 [34] | 1 | 1 | 2 | 1 | high |
| Ortega <i>et al.</i> 1997 [35] | 1 | 1 | 2 | 1 | high |
| Payette <i>et al.</i> 1995 [36] | 0 | 1 | 2 | 0 | moderate |
| Pedersen <i>et al.</i> 2010 [37] | 1 | 1 | 1 | 0 | moderate |
| Pietinen <i>et al.</i> 2010 [38] | 1 | 0 | 1 | 0 | low |
| Posner <i>et al.</i> 1994 [39] | 1 | 1 | 0 | 0 | low |
| Pradignac <i>et al.</i> 1995 [40] | 1 | 1 | 2 | 0 | moderate |
| Rothenberg <i>et al.</i> 1996 [41] | 1 | 1 | 1 | 1 | moderate |
| Serra Majem <i>et al.</i> 2006 [42] | 1 | 0 | 1 | 0 | low |
| Sette <i>et al.</i> 2011 [43] | 1 | 1 | 1 | 0 | moderate |
| Szponar <i>et al.</i> 2001 [44] | 1 | 0 | 0 | 0 | low |
| Toffanello <i>et al.</i> 2010 [45] | 0 | 0 | 2 | 1 | moderate |
| Trichopoulou <i>et al.</i> 1995 [46] | 0 | 0 | 2 | 1 | moderate |
| USDA <i>et al.</i> 2012 [47] | 1 | 1 | 2 | 1 | high |
| Velho <i>et al.</i> 1998 [48] | 0 | 0 | 1 | 1 | low |
| Zoltick <i>et al.</i> 2011 [49] | 1 | 1 | 2 | 1 | high |

N.a., not applicable: the quality could not be assessed as study design details could not be retrieved; NCSR, National Centre for Social Research; USDA, U.S. Department of Agriculture.

* Recruitment place and year were clearly stated; [†] In- and exclusion criteria during sample selection were clearly stated; [‡] Method was one of the following: validated FFQ, dietary history, 24h recall, dietary records of at least 3d or when less than 3d adjusted for intra-individual variability; [§] All older persons included in the study were accounted for or reasons for exclusion from data analysis were disclosed. Items ^{*}, [†], [‡] were scored on absence (0 points) or presence (1 point) of the quality item. Item [§] was scored on absence (0 points), presence of appropriate method (1 point) or presence of validated appropriate method (2 points).

Table S3 Individual study data, energy and macronutrient intake (mean±SD) of community-dwelling older men

| Reference | n | Energy | | | | Protein | | | | Carbohydrate | | | | Fat | | | | SFA | | | | MUFA | | | | PUFA | | | | | | |
|------------------------------------|------|--------|------|------|------|---------|------|-----|------|--------------|------|-----------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|----|------|-----|------|----|------|---|------|
| | | kcal | SD | MJ | SD | g | SD | En% | SD | g/ kg bw | SD | % <EAR | g | SD | En% | SD | g | SD | En% | SD | g | SD | En% | SD | g | SD | En% | SD | | | | |
| Adamson <i>et al.</i> [3] | 36 | 3059 | 576 | 12.8 | 2.4 | 101 | 18 | 13 | 2 | 1.3 | 0.2 | 0 | - | - | - | - | 117 | 31 | 35 | 9 | - | - | - | - | - | - | - | - | - | | | |
| Alstad <i>et al.</i> [4] 1981-1982 | 132 | 2603 | 645 | 10.9 | 2.7 | - | - | - | - | - | - | - | 309 | 81 | 48 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| Alstad <i>et al.</i> [4] 1992-1993 | 59 | 2460 | 717 | 10.3 | 3.0 | - | - | - | - | - | - | - | 295 | 107 | 48 | 7 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| Alstad <i>et al.</i> [4] 1995 | 81 | 2580 | 597 | 10.8 | 2.5 | - | - | - | - | - | - | - | 317 | 94 | 50 | 8 | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| Becker <i>et al.</i> [5, 10] | 64 | 2292 | 669 | 9.6 | 2.8 | 89 | 11 | 16 | 2 | 1.1 | 0.1 | 0 | 272 | 35 | 47 | 6 | 86 | 15 | 34 | 6 | 38 | 8 | 15 | 3 | 31 | 6 | 12 | 2 | 11 | 2 | 4 | 1 |
| Boilson <i>et al.</i> [6] | 54 | 2396 | 908 | 10.0 | 3.8 | 101 | 40 | 17 | n.a. | 1.3 | 0.5 | 11 | 301 | 113 | 50 | n.a. | 96 | 50 | 36 | n.a. | - | - | - | - | - | - | - | - | - | - | | |
| Castetbon <i>et al.</i> [7, 10] | 130 | 2150 | 547 | 9.0 | 0.2 | 89 | 23 | 17 | 4 | 1.1 | 0.3 | 6 | 236 | 57 | 44 | 11 | 80 | 23 | 34 | 10 | 32 | n.a. | 14 | n.a. | - | - | - | - | - | - | - | |
| Correa Leite <i>et al.</i> [8] | 847 | 2422 | n.a. | 10.1 | n.a. | 106 | n.a. | 17 | n.a. | 1.3 | n.a. | n.a. | 291 | n.a. | 46 | n.a. | 82 | n.a. | 30 | n.a. | 31 | n.a. | 12 | n.a. | 33 | n.a. | 12 | n.a. | 11 | n.a. | 4 | n.a. |
| Elmadfa <i>et al.</i> [9, 10] | 147 | 1839 | 576 | 7.7 | 2.4 | 69 | 14 | 15 | 3 | 0.9 | 0.2 | 12 | 192 | 35 | 42 | 8 | 77 | 12 | 38 | 6 | 32 | 6 | 16 | 3 | 26 | 7 | 13 | 3 | 15 | 4 | 7 | 2 |
| Elmadfa <i>et al.</i> [10] | 177 | 3104 | 979 | 13.0 | 4.1 | 133 | 27 | 17 | 4 | 1.7 | 0.3 | 0 | 320 | 60 | 41 | 8 | 141 | 31 | 41 | 9 | 87 | 15 | 25 | 4 | 54 | 16 | 16 | 5 | - | - | - | - |
| Feart <i>et al.</i> [11] | 607 | 2017 | 529 | 8.4 | 2.2 | 87 | 22 | 17 | 4 | 1.1 | 0.3 | 6 | 226 | 49 | 45 | 10 | 68 | 19 | 30 | 9 | 29 | 9 | 13 | 4 | 25 | 9 | 11 | 4 | 10 | 5 | 4 | 2 |
| Fidanza <i>et al.</i> [12] 65-<70y | 41 | 2670 | 602 | 11.2 | 2.5 | 78 | 22 | 12 | 3 | 1.0 | 0.3 | 13 | 303 | 108 | 45 | 16 | 77 | 20 | 26 | 7 | 22 | 6 | 7 | 2 | - | - | - | - | 8 | 5 | 3 | 2 |
| Fidanza <i>et al.</i> [12] ≥70y | 60 | 2510 | 724 | 10.5 | 3.0 | 73 | 26 | 12 | 4 | 0.9 | 0.3 | 22 | 288 | 100 | 46 | 16 | 77 | 27 | 28 | 10 | 21 | 10 | 8 | 4 | - | - | - | - | 7 | 4 | 3 | 1 |
| Finch <i>et al.</i> [13] | 96 | 1720 | 449 | 7.2 | 1.9 | 62 | 15 | 14 | 4 | 0.8 | 0.2 | 28 | - | - | - | - | 69 | 22 | 36 | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 68-72y | 56 | 2023 | 552 | 8.5 | 2.3 | 85 | 26 | 17 | 5 | 1.1 | 0.3 | 11 | 233 | 65 | 46 | 13 | 77 | 24 | 34 | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 73-77y | 58 | 1987 | 456 | 8.3 | 1.9 | 82 | 25 | 16 | 5 | 1.0 | 0.3 | 12 | 227 | 57 | 46 | 11 | 79 | 22 | 36 | 10 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 78-82y | 48 | 1754 | 579 | 7.3 | 2.4 | 73 | 25 | 17 | 6 | 0.9 | 0.3 | 20 | 209 | 77 | 48 | 18 | 69 | 27 | 35 | 14 | - | - | - | - | - | - | - | - | - | - | - | |
| Gibson [15] | 429 | 1856 | 456 | 7.8 | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Gray-Donald <i>et al.</i> [16] | 42 | 1546 | 410 | 6.5 | 1.7 | 58 | 18 | 15 | 5 | 0.7 | 0.2 | 39 | 205 | n.a. | 53 | n.a. | 57 | n.a. | 33 | n.a. | - | - | - | - | - | - | - | - | - | - | - | |
| Griep <i>et al.</i> [17] 60-<75y | 38 | 1959 | 358 | 8.2 | 1.5 | 83 | 11 | 17 | 2 | 1.0 | 0.1 | 0 | 209 | 34 | 43 | 7 | 77 | 12 | 36 | 6 | 33 | 7 | 15 | 3 | 29 | 5 | 14 | 3 | 13 | 7 | 6 | 3 |
| Griep <i>et al.</i> [17] >75y | 8 | 1625 | 430 | 6.8 | 1.8 | 69 | 9 | 17 | 2 | 0.9 | 0.1 | 4 | 159 | 26 | 39 | 7 | 71 | 9 | 39 | 5 | 29 | 5 | 16 | 3 | 27 | 8 | 15 | 4 | 14 | 6 | 8 | 3 |
| Health Canada <i>et al.</i> [18] | 1520 | 1871 | 324 | 7.8 | 1.4 | 77 | 36 | 16 | 8 | 1.0 | 0.5 | 26 | 234 | 36 | 50 | 8 | 64 | 32 | 31 | 16 | 21 | 16 | 10 | 8 | 25 | 16 | 12 | 8 | 12 | 8 | 6 | 4 |
| Horwath <i>et al.</i> [50] | 255 | 2073 | 471 | 8.7 | 2.0 | 68 | 17 | 13 | 3 | 0.9 | 0.2 | 19 | 279 | 70 | 54 | 14 | 77 | 20 | 33 | 9 | 34 | 11 | 15 | 5 | - | - | - | - | 10 | 4 | 4 | 2 |
| Hulshof <i>et al.</i> [10, 20, 51] | 185 | 2245 | 573 | 9.4 | 2.4 | 90 | 17 | 16 | 3 | 1.1 | 0.2 | 1 | 241 | 39 | 43 | 7 | 92 | 17 | 37 | 7 | 37 | 10 | 15 | 4 | 30 | 7 | 12 | 3 | 17 | 5 | 7 | 2 |
| Johansson <i>et al.</i> [10, 21] | 176 | 2149 | 740 | 9.0 | 3.1 | 93 | 20 | 17 | 4 | 1.2 | 0.3 | 2 | 267 | 48 | 51 | 6 | 74 | 14 | 31 | 6 | 29 | 7 | 12 | 3 | 26 | 5 | 11 | 2 | 12 | 5 | 5 | 2 |
| Konstantinova <i>et al.</i> [22] | 1275 | 2011 | 511 | 8.4 | 2.1 | 79 | 22 | 16 | 4 | 1.0 | 0.3 | 11 | - | - | - | - | 71 | 22 | 32 | 10 | 28 | 9 | 12 | 4 | 22 | 7 | 10 | 3 | 15 | 7 | 7 | 3 |
| Lopes <i>et al.</i> [10, 24] | 246 | 2221 | 525 | 9.3 | 2.2 | 97 | 13 | 18 | 2 | 1.2 | 0.2 | 0 | - | - | - | - | 66 | 11 | 27 | 5 | 19 | 5 | 8 | 2 | 29 | 6 | 12 | 2 | 11 | 2 | 5 | 1 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------------|-------------|-----|------------|-----|-----------|----|-----------|---|------------|-----|-----------|------------|-----|-----------|----|-----------|----|-----------|----|-----------|-----------|----|-----------|-----------|----|-----------|---|----------|----|----------|---|
| Szponar <i>et al.</i> [10, 44] | 176 | 2460 | 860 | 10.3 | 3.6 | 84 | 20 | 14 | 3 | 1.1 | 0.3 | 6 | 308 | 58 | 50 | 10 | 98 | 25 | 36 | 9 | 35 | 11 | 13 | 4 | 42 | 13 | 15 | 5 | 14 | 7 | 5 | 3 |
| Toffanello <i>et al.</i> [45] | 34 | 1997 | 540 | 8.4 | 2.3 | 60 | 16 | 12 | 3 | 0.8 | 0.2 | 32 | 253 | 74 | 51 | 15 | 63 | 22 | 28 | 10 | 21 | 9 | 10 | 4 | 28 | 11 | 13 | 5 | 6 | 3 | 3 | 1 |
| Trichopoulou <i>et al.</i> [46] | 91 | 2345 | 625 | 9.8 | 2.6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 35 | 14 | 13 | 11 | 34 | 14 | 13 | 5 | 15 | 7 | 6 | 3 |
| USDA <i>et al.</i> [47] | 484 | 1907 | 904 | 8.0 | 3.8 | 74 | 39 | 16 | 8 | 0.9 | 0.5 | 29 | 232 | 112 | 49 | 24 | 72 | 38 | 15 | 8 | 23 | 14 | 5 | 3 | 27 | 15 | 6 | 3 | 16 | 12 | 3 | 3 |
| Velho <i>et al.</i> [48] | 55 | 1335 | 384 | 5.6 | 1.6 | 79 | 2 | 24 | 1 | 1.0 | 0.0 | 0 | 172 | 4 | 52 | 1 | 44 | 2 | 29 | 1 | 14 | 1 | 10 | 0 | 14 | 1 | 9 | 1 | 5 | 0 | 4 | 0 |
| Zoltick <i>et al.</i> [49] | 298 | 1871 | 623 | 7.8 | 2.6 | 70 | 24 | 15 | 5 | 0.9 | 0.3 | 23 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mean Intake | 14419 | 2137 | | 8.9 | | 81 | | 15 | | 1.0 | | 12 | 247 | | 46 | | 82 | | 34 | | 31 | 13 | | 32 | 13 | | 13 | | 5 | | 5 | |
| SD | | 350 | | 1.5 | | 13 | | 2 | | 0.2 | | 10 | 42 | | 4 | | 17 | | 5 | | 11 | 4 | | 8 | 2 | | 5 | | 2 | | 2 | |

Table S4 Individual study data, energy and macronutrient intake (mean±SD) of community-dwelling older women

| Reference | n | Energy | | | Protein | | | | Carbohydrate | | | | Fat | | | SFA | | | MUFA | | | PUFA | | | | | | | | | | |
|------------------------------------|------|--------|------|------|---------|-----|------|-----|--------------|---------|------|--------|-----|------|-----|------|-----|------|------|------|----|------|-----|------|----|------|-----|------|----|------|---|------|
| | | kcal | SD | MJ | SD | g | SD | En% | SD | g/kg bw | SD | % <EAR | g | SD | En% | SD | g | SD | En% | SD | g | SD | En% | SD | g | SD | En% | SD | | | | |
| Adamson <i>et al.</i> [3] | 46 | 2606 | 566 | 10.9 | 2.4 | 90 | 20 | 14 | 3 | 1.4 | 0.3 | 1 | - | - | - | - | 107 | 30 | 37 | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| Alstad <i>et al.</i> [4] 1981-1982 | 129 | 2006 | 525 | 8.4 | 2.2 | - | - | - | - | - | - | - | 244 | 68 | 49 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Alstad <i>et al.</i> [4] 1992-1993 | 131 | 1911 | 454 | 8.0 | 1.9 | - | - | - | - | - | - | - | 232 | 62 | 48 | 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Alstad <i>et al.</i> [4] 1995 | 92 | 2245 | 621 | 9.4 | 2.6 | - | - | - | - | - | - | - | 276 | 85 | 50 | 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Becker <i>et al.</i> [5, 10] | 58 | 1887 | 478 | 7.9 | 2.0 | 77 | 12 | 16 | 3 | 1.2 | 0.2 | 0 | 228 | 25 | 48 | 5 | 70 | 9 | 33 | 4 | 30 | 5 | 14 | 2 | 25 | 3 | 12 | 2 | 10 | 3 | 5 | 1 |
| Boilson <i>et al.</i> [6] | 81 | 2211 | 743 | 9.3 | 3.1 | 92 | 25 | 17 | n.a. | 1.4 | 0.4 | 2 | 282 | 106 | 51 | n.a. | 87 | 38 | 35 | n.a. | - | - | - | - | - | - | - | - | - | - | - | |
| Castetbon <i>et al.</i> [7, 10] | 219 | 1600 | 355 | 6.7 | 1.5 | 70 | 15 | 18 | 4 | 1.1 | 0.2 | 3 | 182 | 30 | 45 | 8 | 61 | 15 | 35 | 8 | 24 | n.a. | 13 | n.a. | - | - | - | - | - | - | - | |
| Correa Leite <i>et al.</i> [8] | 1465 | 2059 | n.a. | 8.6 | n.a. | 89 | n.a. | 17 | n.a. | 1.4 | n.a. | n.a. | 265 | n.a. | 49 | n.a. | 73 | n.a. | 31 | n.a. | 28 | n.a. | 12 | n.a. | 29 | n.a. | 13 | n.a. | 10 | n.a. | 4 | n.a. |
| Elmadfa <i>et al.</i> [9, 10] | 202 | 1695 | 406 | 7.1 | 1.7 | 64 | 11 | 15 | 3 | 1.0 | 0.2 | 3 | 195 | 26 | 46 | 6 | 71 | 10 | 38 | 5 | 31 | 6 | 16 | 3 | 23 | 4 | 12 | 2 | 13 | 4 | 7 | 2 |
| Elmadfa <i>et al.</i> [10] | 341 | 2602 | 812 | 10.9 | 3.4 | 106 | 20 | 16 | 3 | 1.6 | 0.3 | 0 | 286 | 60 | 44 | 9 | 115 | 23 | 40 | 8 | 72 | 14 | 25 | 5 | 43 | 10 | 15 | 3 | - | - | - | - |
| Fearr <i>et al.</i> [11] | 988 | 1530 | 457 | 6.4 | 1.9 | 71 | 19 | 18 | 5 | 1.1 | 0.3 | 7 | 180 | 38 | 47 | 10 | 53 | 15 | 31 | 9 | 23 | 8 | 13 | 5 | 19 | 7 | 11 | 4 | 8 | 5 | 5 | 3 |
| Fidanza <i>et al.</i> [12] 65-<70y | 54 | 1986 | 620 | 8.3 | 2.6 | 67 | 20 | 14 | 4 | 1.0 | 0.3 | 11 | 249 | 85 | 50 | 17 | 71 | 23 | 35 | 10 | 20 | 6 | 9 | 3 | - | - | - | - | 7 | 4 | 3 | 2 |
| Fidanza <i>et al.</i> [12] ≥70y | 52 | 1832 | 438 | 7.7 | 1.8 | 62 | 15 | 14 | 3 | 1.0 | 0.2 | 10 | 222 | 71 | 48 | 16 | 70 | 23 | 38 | 11 | 20 | 7 | 10 | 3 | - | - | - | - | 7 | 4 | 3 | 2 |
| Finch <i>et al.</i> [13] | 170 | 1378 | 358 | 5.8 | 1.5 | 51 | 15 | 15 | 4 | 0.8 | 0.2 | 30 | - | - | - | - | 58 | 19 | 38 | 12 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 68-72y | 58 | 1715 | 432 | 7.2 | 1.8 | 78 | 22 | 18 | 5 | 1.2 | 0.3 | 6 | 204 | 60 | 47 | 14 | 68 | 20 | 35 | 10 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 73-77y | 59 | 1623 | 520 | 6.8 | 2.2 | 67 | 23 | 16 | 6 | 1.0 | 0.4 | 16 | 195 | 66 | 48 | 16 | 65 | 25 | 36 | 14 | - | - | - | - | - | - | - | - | - | - | - | |
| Gaudreau <i>et al.</i> [14] 78-82y | 51 | 1700 | 580 | 7.1 | 2.4 | 72 | 30 | 17 | 7 | 1.1 | 0.5 | 17 | 211 | 81 | 50 | 19 | 66 | 23 | 35 | 12 | - | - | - | - | - | - | - | - | - | - | - | |
| Gibson [15] | 377 | 1435 | 330 | 6.0 | 1.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Gray-Donald <i>et al.</i> [16] | 103 | 1152 | 332 | 4.8 | 1.4 | 45 | 13 | 16 | 5 | 0.7 | 0.2 | 44 | 153 | n.a. | 53 | n.a. | 42 | n.a. | 33 | n.a. | - | - | - | - | - | - | - | - | - | - | - | |
| Griep <i>et al.</i> [17] 60-<75y | 53 | 1672 | 310 | 7.0 | 1.3 | 71 | 10 | 17 | 2 | 1.1 | 0.2 | 0 | 177 | 23 | 42 | 6 | 68 | 11 | 37 | 6 | 29 | 6 | 16 | 3 | 25 | 5 | 13 | 3 | 13 | 7 | 7 | 4 |
| Griep <i>et al.</i> [17] >75y | 20 | 1457 | 239 | 6.1 | 1.0 | 69 | 12 | 19 | 3 | 1.1 | 0.2 | 1 | 150 | 13 | 41 | 4 | 61 | 8 | 38 | 5 | 26 | 6 | 16 | 3 | 23 | 4 | 14 | 2 | 11 | 6 | 7 | 4 |
| Health Canada <i>et al.</i> [18] | 2610 | 1507 | 191 | 6.3 | 0.8 | 63 | 7 | 17 | 2 | 1.0 | 0.1 | 0 | 195 | 58 | 52 | 15 | 51 | 26 | 30 | 15 | 17 | 17 | 10 | 10 | 20 | 9 | 12 | 5 | 9 | 9 | 6 | 5 |
| Horwath <i>et al.</i> [50] | 457 | 1772 | 420 | 7.4 | 1.8 | 59 | 15 | 13 | 3 | 0.9 | 0.2 | 14 | 250 | 64 | 56 | 14 | 65 | 19 | 33 | 10 | 29 | 10 | 15 | 5 | | | | | 9 | 4 | 5 | 2 |
| Hulshof <i>et al.</i> [10, 20, 51] | 236 | 1791 | 454 | 7.5 | 1.9 | 76 | 18 | 17 | 4 | 1.2 | 0.3 | 3 | 197 | 14 | 44 | 7 | 74 | 14 | 37 | 7 | 30 | 8 | 15 | 4 | 24 | 6 | 12 | 3 | 14 | 6 | 7 | 3 |
| Johansson <i>et al.</i> [10, 21] | 166 | 1672 | 478 | 7.0 | 2.0 | 71 | 13 | 17 | 3 | 1.1 | 0.2 | 2 | 217 | 25 | 52 | 6 | 56 | 11 | 30 | 6 | 22 | 6 | 12 | 3 | 20 | 4 | 11 | 2 | 9 | 2 | 5 | 1 |
| Konstantinova <i>et al.</i> [22] | 1580 | 1532 | 449 | 6.4 | 1.9 | 62 | 18 | 16 | 4 | 0.9 | 0.3 | 15 | - | - | - | - | 52 | 20 | 31 | 12 | 21 | 10 | 12 | 6 | 16 | 6 | 10 | 4 | 11 | 6 | 6 | 4 |
| Lopes <i>et al.</i> [10, 24] | 339 | 1910 | 454 | 8.0 | 1.9 | 89 | 11 | 19 | 2 | 1.4 | 0.2 | 0 | - | - | - | - | 59 | 10 | 28 | 5 | 18 | 4 | 8 | 2 | 26 | 5 | 12 | 2 | 10 | 2 | 5 | 1 |
| Luhrmann <i>et al.</i> [25] | 220 | 1985 | 522 | 8.3 | 2.2 | 84 | 21 | 17 | 4 | 1.3 | 0.3 | 3 | 238 | 60 | 48 | 6 | 78 | 26 | 35 | 6 | - | - | - | - | - | - | - | - | - | - | - | |

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|---------------------------------|--------------|-------------|-----|------------|-----|-----------|----|-----------|---|------------|-----|-----------|------------|----|-----------|----|-----------|----|-----------|----|-----------|----|-----------|---|-----------|----|-----------|---|-----------|----|----------|---|
| Toffanello <i>et al.</i> [45] | 44 | 1644 | 472 | 6.9 | 2.0 | 55 | 17 | 14 | 4 | 0.9 | 0.3 | 23 | 217 | 75 | 53 | 18 | 58 | 19 | 32 | 11 | 21 | 8 | 11 | 4 | 25 | 10 | 14 | 5 | 7 | 4 | 4 | 2 |
| Trichopoulou <i>et al.</i> [46] | 91 | 1912 | 516 | 8.0 | 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 29 | 11 | 13 | 5 | 28 | 11 | 13 | 5 | 13 | 6 | 6 | 3 |
| USDA <i>et al.</i> [47] | 513 | 1535 | 779 | 6.4 | 3.3 | 60 | 34 | 16 | 9 | 0.9 | 0.5 | 31 | 196 | 93 | 51 | 24 | 58 | 32 | 15 | 8 | 19 | 11 | 5 | 3 | 20 | 12 | 5 | 3 | 16 | 12 | 4 | 3 |
| Velho <i>et al.</i> [48] | 132 | 1335 | 384 | 5.6 | 1.9 | 72 | 1 | 17 | 1 | 1.1 | 0.0 | 0 | 190 | 3 | 45 | 1 | 45 | 1 | 24 | 0 | 16 | 1 | 8 | 0 | 15 | 1 | 8 | 0 | 5 | 0 | 3 | 0 |
| Zoltick <i>et al.</i> [49] | 509 | 1680 | 550 | 7.0 | 2.3 | 69 | 24 | 16 | 6 | 1.1 | 0.4 | 14 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Mean Intake | 19413 | 1737 | | 7.3 | | 69 | | 16 | | 1.1 | | 10 | 208 | | 47 | | 68 | | 34 | | 26 | | 13 | | 26 | | 13 | | 11 | | 6 | |
| SD | | 297 | | 1.2 | | 11 | | 2 | | 0.2 | | 10 | 37 | | 4 | | 15 | | 5 | | 9 | | 3 | | 7 | | 3 | | 4 | | 2 | |

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