

The minimum methionine requirement of adults ≥ 60 years is the same in males and females; Alyssa Paoletti
“Online Supplementary Material”

Table S1. Plasma amino acid concentrations of older adults who participated in the study to determine the minimum methionine requirement of adults ≥ 60 y in good health¹

Amino Acids ¹ , $\mu\text{mol/L}$	Methionine Intake, mg/kg/d						
	0	1	3	8	14	17	20
Alanine	622 \pm 69	625 \pm 167	778 \pm 111	722 \pm 149	676 \pm 76	675 \pm 93	698 \pm 71
Arginine	144 \pm 14	145 \pm 37	170 \pm 22	151 \pm 29	154 \pm 16	146 \pm 24	153 \pm 17
Cysteine ²	309 \pm 8.0	295 \pm 6.8	308 \pm 8.8	297 \pm 10	314 \pm 11	304 \pm 11	302 \pm 11
Citrulline	53 \pm 7.4	51 \pm 14	71 \pm 10	65 \pm 13	58 \pm 8.3	53 \pm 9.2	52 \pm 8.1
Glutamate	93 \pm 16	114 \pm 42	105 \pm 15	110 \pm 21	99 \pm 15	79 \pm 11	84 \pm 12
Glutamine	1609 \pm 178	1563 \pm 432	1988 \pm 256	1830 \pm 397	1680 \pm 188	1686 \pm 240	1672 \pm 196
Glycine	296 \pm 47	285 \pm 64	405 \pm 54	304 \pm 66	377 \pm 58	308 \pm 45	341 \pm 37
Histidine	114 \pm 12	121 \pm 30	138 \pm 16	129 \pm 25	122 \pm 11	121 \pm 14	132 \pm 13
Isoleucine	200 \pm 27	208 \pm 64	214 \pm 36	210 \pm 51	190 \pm 23	170 \pm 29	177 \pm 19
Leucine	254 \pm 37	260 \pm 84	267 \pm 45	261 \pm 67	216 \pm 26	207 \pm 37	198 \pm 26
Lysine	266 \pm 26	268 \pm 69	321 \pm 39	293 \pm 57	271 \pm 29	268 \pm 36	299 \pm 27
Methionine ²	6.3 \pm 1.1 ^a	7.5 \pm 1.4 ^a	12 \pm 2.1 ^{a,b}	18 \pm 1.8 ^b	29 \pm 4.1 ^c	30 \pm 2.2 ^c	34 \pm 1.6 ^c
Phenylalanine	131 \pm 14	121 \pm 29	149 \pm 16	133 \pm 25	119 \pm 10	122 \pm 13	141 \pm 9.5
Proline	294 \pm 40	304 \pm 81	358 \pm 50	329 \pm 64	308 \pm 36	285 \pm 43	309 \pm 34
Serine	193 \pm 23	183 \pm 48	250 \pm 36	194 \pm 41	205 \pm 26	189 \pm 32	174 \pm 18
Threonine	204 \pm 24	194 \pm 53	266 \pm 39	223 \pm 44	217 \pm 26	210 \pm 37	219 \pm 28
Tyrosine	122 \pm 14	122 \pm 34	133 \pm 16	135 \pm 30	110 \pm 11	109 \pm 15	115 \pm 12
Valine	569 \pm 79	565 \pm 145	637 \pm 91	577 \pm 128	560 \pm 59	510 \pm 77	489 \pm 45

Total IAA	1744 ± 209	1744 ± 471	2005 ± 268	1843 ± 380	1724 ± 175	1541 ± 233	1977 ± 308
Total DAA	3846 ± 397	3778 ± 941	4695 ± 549	4249 ± 814	4094 ± 404	3763 ± 512	4142 ± 403
Total AA	5589 ± 599	5522 ± 1407	6700 ± 806	6092 ± 1184	5818 ± 573	5304 ± 737	6119 ± 685

¹All values are means ± SEM. *n* = 7 females and *n* = 6 males. Amino acid analysis by UPLC (Waters Corporation, Milford, MA). Values with different superscripts were significantly different, *P* < 0.05 determined by joint linear mixed effect model with sex and methionine intake as fixed effect terms and subject as a random effect term. Plasma AA concentrations were unaffected by sex (*P* > 0.05). IAA, indispensable amino acids; NIAA, non-indispensable amino acids.

²Methionine and cysteine analyzed using UPLC-MS/MS whereby the MS/MS (Waters Xevo TQS mass spectrometer; Waters Corporation, Milford, MA) is coupled to UPLC (Waters H class UPLC; Waters Corporation, Milford, MA). The University of British Columbia.