

Table 3. Intakes of amino acids by habitual diet group^a

Geometric mean intake (95% confidence interval), g/d % mean difference compared with meat-eaters					P _{difference} ^b
	Meat-eaters (n = 98)	Fish-eaters (n = 98)	Vegetarians (n = 98)	Vegans (n = 98)	
<i>Branched-chain essential amino acids</i>					
Isoleucine	3.54 (3.41, 3.68) Ref.	3.12 (3.00, 3.24) −12	2.95 (2.85, 3.06) −17	2.47 (2.38, 2.57) −30	< 0.0001
Leucine	6.13 (5.90, 6.35) Ref.	5.51 (5.30, 5.71) −10	5.21 (5.03, 5.39) −15	4.33 (4.17, 4.49) −29	< 0.0001
Valine	4.14 (3.99, 4.30) Ref.	3.78 (3.63, 3.91) −9	3.60 (3.47, 3.73) −13	2.95 (2.85, 3.07) −29	< 0.0001
<i>Other essential amino acids</i>					
Histidine	2.12 (2.04, 2.20) Ref.	1.83 (1.77, 1.90) −13	1.72 (1.66, 1.78) −19	1.52 (1.46, 1.57) −28	< 0.0001
Lysine	5.01 (4.78, 5.24) Ref.	4.14 (3.97, 4.33) −17	3.76 (3.60, 3.93) −25	2.82 (2.69, 2.95) −44	< 0.0001
Methionine	1.67 (1.60, 1.74) Ref.	1.38 (1.33, 1.43) −18	1.24 (1.20, 1.29) −26	0.88 (0.84, 0.92) −47	< 0.0001
Phenylalanine	3.55 (3.43, 3.68) Ref.	3.34 (3.24, 3.46) −6	3.21 (3.11, 3.32) −10	2.93 (2.82, 3.03) −18	< 0.0001
Threonine	2.99 (2.88, 3.10) Ref.	2.61 (2.52, 2.71) −13	2.43 (2.34, 2.52) −19	2.19 (2.11, 2.27) −27	< 0.0001
Tryptophan	0.93 (0.90, 0.96) Ref.	0.86 (0.84, 0.89) −7	0.82 (0.79, 0.85) −12	0.77 (0.74, 0.79) −18	< 0.0001
<i>Non-essential amino acids</i>					
Alanine	3.56 (3.42, 3.69) Ref.	2.97 (2.87, 3.08) −16	2.67 (2.57, 2.77) −25	2.63 (2.53, 2.73) −26	< 0.0001
Arginine	4.13 (3.96, 4.31) Ref.	3.69 (3.54, 3.85) −11	3.36 (3.23, 3.51) −19	3.92 (3.75, 4.09) −5	< 0.0001
Aspartate	7.01 (6.75, 7.28) Ref.	6.44 (6.21, 6.67) −8	6.00 (5.79, 6.22) −14	6.33 (6.10, 6.58) −10	< 0.0001
Cystine	1.04 (1.00, 1.08) Ref.	0.94 (0.91, 0.97) −9	0.88 (0.85, 0.91) −15	0.84 (0.81, 0.87) −19	< 0.0001
Glutamate	16.10 (15.59, 16.63) Ref.	15.56 (15.09, 16.05) −3	15.10 (14.64, 15.57) −6	14.06 (13.61, 14.52) −13	< 0.0001
Glycine	3.12 (3.00, 3.25) Ref.	2.56 (2.46, 2.66) −18	2.28 (2.20, 2.37) −27	2.61 (2.50, 2.71) −16	< 0.0001
Proline	5.61 (5.42, 5.80) Ref.	5.47 (5.30, 5.66) −2	5.47 (5.30, 5.66) −2	4.32 (4.17, 4.47) −23	< 0.0001
Serine	3.70 (3.58, 3.84) Ref.	3.56 (3.44, 3.68) −4	3.43 (3.31, 3.54) −8	3.08 (2.97, 3.19) −17	< 0.0001
Tyrosine	2.71 (2.61, 2.82) Ref.	2.48 (2.39, 2.57) −9	2.36 (2.28, 2.45) −13	1.86 (1.79, 1.94) −31	< 0.0001

Abbreviation: Ref., reference. ^aAdjusted for age (30–34; 35–39; 40–44; 45–49 years), body mass index (< 22.5; 22.5–24.9; ≥ 25 kg/m²; unknown), smoking status (never; former; current), alcohol intake (< 1; 1–7; 8–15; ≥ 16 g/d) and energy intake (continuously). ^bP-values are for the difference across all four diet groups calculated by analysis of variance. Conventional P-values are shown, and those marked with in bold were significant after Bonferroni correction (P < 0.0028).