

**Supplemental Table 1. Distribution of fatty acid % areas of plasma phospholipid and dietary energy density in Japanese based in Japan and Japanese-Americans in Hawaii**

Common name	Amount of dietary intake, % energy			% Areas of plasma PL, %			
	Total Median (IRQ)	Japan Median (IRQ)	Hawaii Median (IRQ)	Total Median (IRQ)	Japan Median (IRQ)	Hawaii Median (IRQ)	
<b>Saturated fatty acids</b>							
14:0, myristic	0.46 (0.32, 0.63)	0.44 (0.30, 0.60)	0.57 (0.42, 0.74)	**	0.21 (0.17, 0.28)	0.22 (0.17, 0.28)	0.19 (0.14, 0.24)
16:0, palmitic	4.1 (3.4, 4.8)	3.9 (3.3, 4.6)	5.4 (4.6, 6.3)	**	27.5 (26.1, 29.1)	27.5 (26.3, 29.0)	27.0 (25.3, 30.6)
18:0, stearic	1.6 (1.2, 1.9)	1.5 (1.2, 1.8)	2.6 (2.1, 3.1)	**	14.2 (12.3, 15.4)	13.9 (12.1, 15.2)	15.4 (14.3, 17.1)
Total	6.7 (5.5, 8.1)	6.5 (5.3, 7.6)	9.3 (7.5, 10.9)	**	42.2 (40.3, 44.1)	42.2 (40.1, 44.0)	42.3 (40.9, 49.2)
<b>Monounsaturated fatty acids</b>							
16:1n7, hexadecenoic	0.45 (0.35, 0.55)	0.43 (0.34, 0.52)	0.60 (0.47, 0.74)	**	0.37 (0.29, 0.5)	0.37 (0.29, 0.50)	0.39 (0.30, 0.49)
18:1n9, oleic	8.2 (6.9, 9.9)	7.9 (6.6, 9.3)	11.0 (9.4, 13.0)	**	8.1 (7.3, 9.0)	8.13 (7.32, 9.05)	8.2 (7.5, 8.9)
20:1n9, eicosenoic	0.21 (0.15, 0.30)	0.24 (0.18, 0.32)	0.09 (0.07, 0.12)	**	0.12 (0.06, 0.16)	0.13 (0.06, 0.17)	0.09 (0.07, 0.11)
Total	9.2 (7.7, 10.9)	8.9 (7.6, 10.4)	11.7 (9.9, 13.8)	**	10.3 (9.4, 11.4)	10.4 (9.4, 11.4)	10.2 (9.4, 10.8)
<b>Polyunsaturated fatty acids</b>							
n-3							

18:3n3, a-linolenic	0.78 (0.61, 0.96)	0.79 (0.62, 0.98)	0.69 (0.55, 0.85)	**	0.22 (0.17, 0.27)	0.22 (0.17, 0.28)	0.17 (0.13, 0.22)	**
20:5n3, eicosapentaenoic	0.13 (0.07, 0.21)	0.15 (0.09, 0.22)	0.03 (0.01, 0.07)	**	3.3 (2.0, 5.0)	3.8 (2.6, 5.2)	0.64 (0.47, 0.97)	**
22:5n3, docosapentaenoic	0.04 (0.02, 0.06)	0.04 (0.02, 0.06)	0.01 (0.01, 0.03)	**	1.2 (1.0, 1.4)	1.2 (1.0, 1.4)	1.0 (0.7, 1.1)	**
22:6n, decosahexaenoic	0.24 (0.15, 0.34)	0.27 (0.18, 0.36)	0.05 (0.03, 0.12)	**	8.1 (6.7, 9.7)	8.6 (7.4, 9.9)	4.0 (3.0, 5.4)	**
20:5n3 + 22:6n3	0.37 (0.22, 0.56)	0.42 (0.27, 0.59)	0.09 (0.04, 0.19)	**	11.7 (9.2, 14.5)	12.3 (10.3, 15.1)	4.7 (3.5, 6.5)	**
Total	1.2 (1.0, 1.5)	1.3 (1.1, 1.6)	0.86 (0.69, 1.05)	**	13.3 (10.5, 16.2)	14.0 (11.8, 16.9)	6.1 (4.6, 7.8)	**
<b>n-6</b>								
18:2n6, linoleic	5.0 (4.1, 6.1)	4.8 (4.1, 5.7)	6.6 (5.5, 7.5)	**	21.4 (19.0, 24.0)	21.2 (18.7, 23.8)	22.7 (20.4, 25.3)	**
20:4n6, arachidonic	0.07 (0.05, 0.09)	0.07 (0.05, 0.08)	0.08 (0.05, 0.10)	**	8.9 (7.7, 10.2)	8.7 (7.7, 9.8)	11.1 (9.2, 13.2)	**
Total	5.1 (4.2, 6.2)	4.9 (4.1, 5.8)	6.7 (5.6, 7.6)	**	33.5 (30.2, 36.7)	32.9 (29.7, 35.5)	39.4 (35.3, 41.8)	**
Total polyunsaturated fatty acids	6.5 (5.5, 7.6)	6.3 (5.4, 7.3)	7.4 (6.3, 8.5)	**	47.1 (44.4, 49.4)	47.2 (44.5, 49.7)	46.7 (40.2, 48.5)	**
<b>Trans fatty acids</b>								
16:1t	0.01 (0.01, 0.02)	0.01 (0.00, 0.01)	0.03 (0.02, 0.04)	**	0.06 (0.04, 0.08)	0.06 (0.04, 0.08)	0.06 (0.05, 0.08)	*
18:1t	0.36 (0.20, 0.64)	0.30 (0.17, 0.49)	1.3 (0.9, 1.7)	**	0.22 (0.12, 0.33)	0.18 (0.11, 0.29)	0.44 (0.33, 0.59)	**
18:2t total	0.07 (0.05, 0.10)	0.06 (0.05, 0.09)	0.18 (0.14, 0.23)	**	0.01 (0.00, 0.02)	0.01 (0.00, 0.02)	0.01 (0.00, 0.02)	
Total	0.44 (0.26, 0.76)	0.37 (0.23, 0.58)	1.5 (1.1, 2.0)	**	0.30 (0.19, 0.43)	0.26 (0.18, 0.38)	0.53 (0.41, 0.68)	**

Differences between countries were evaluated using Wilcoxon signed-rank test; \*\* $P < 0.001$ , \*  $P < 0.05$ . PL, phospholipid; IQR, interquartile range; *t*, trans.