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# Canadian Community Health Survey Cycle 2.2, Nutrition (2004)

## Nutrient Intakes from Food

Provincial, Regional and National Summary Data Tables  
Volume 3

Revised February 2009

**Note:**

This PDF contains the 12 data tables for Quebec as well as the Appendices.



Canada 

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**Table 29.5 Folic acid (µg/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2,3</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles (and SE) of usual intake													
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)							
Both	1-3	311	236	(11)	125	(16)	145	(15)	183	(14)	231	(15)	286	(17)	340	(22)	375	(27)
	4-8	485	318	(13)	244	(28)	260	(25)	289	(19)	324	(16)	361	(20)	399	(29)	424	(37)
Male	9-13	277	400	(19)	259	(30)	288	(28)	341	(26)	407	(26)	485	(32)	568	(43)	623	(53)
	14-18	339	435	(18)	259	(24)	292	(24)	354	(22)	436	(24)	537	(33)	654	(54)	739	(68)
	19-30	237	472	(25)	311	(37)	344	(34)	404	(29)	480	(27)	565	(35)	651	(51)	706	(63)
	31-50	423	438	(15)	288	(25)	318	(23)	372	(20)	438	(18)	513	(22)	592	(30)	645	(38)
	51-70	387	394	(16)	248	(22)	275	(20)	324	(18)	388	(19)	465	(30)	553	(51)	616	(73)
	>70	132	329	(23)	172	(41) <sup>E</sup>	200	(39) <sup>E</sup>	254	(35)	321	(34)	393	(39)	466	(51)	517	(64)
	19+	1179	423	(11)	259	(13)	291	(13)	348	(12)	420	(12)	505	(15)	596	(22)	660	(29)
	Female	9-13	281	320	(13)	200	(22)	221	(21)	259	(18)	307	(17)	361	(21)	415	(30)	450
14-18		321	369	(17)	225	(23)	254	(22)	306	(21)	371	(23)	441	(30)	510	(39)	553	(45)
19-30		249	412	(34)	280	(45)	303	(42)	345	(37)	395	(36)	452	(42)	508	(55)	545	(66)
31-50		364	362	(25)	269	(41)	289	(37)	325	(32)	369	(30)	417	(34)	467	(48)	500	(60)
51-70		467	331	(10)	201	(15)	226	(14)	271	(12)	327	(12)	392	(16)	460	(23)	506	(29)
>70		215	270	(13)	158	(18)	178	(18)	217	(17)	266	(18)	327	(24)	397	(36)	449	(49)
19+		1295	351	(12)	212	(13)	237	(13)	284	(13)	345	(14)	417	(18)	496	(25)	552	(32)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for folic acid.

<sup>3</sup> There are two chemical forms in foods that contribute to folate bioactivity: naturally occurring folate called “food folate” and the added synthetic form of folate called “folic acid.” The term “folic acid” is a measuring unit referring to the simple arithmetic sum of the content of both food folate and folic acid in foods (in micrograms).

For additional footnotes common to all tables, see Appendix A.

**Table 30.5 Linolenic acid (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean (SE)	Percentiles (and SE) of usual intake							AI <sup>3</sup>	% >AI	(SE)
				5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)			
Both	1-3	311	0.92 (0.05)	0.43 (0.06)	0.51 (0.06)	0.67 (0.06)	0.88 (0.06)	1.15 (0.10)	1.43 (0.16)	1.62 (0.21)	0.7	71.4	(6.9)
	4-8	485	1.40 (0.07)	0.85 (0.15) <sup>E</sup>	0.95 (0.13)	1.14 (0.11)	1.39 (0.09)	1.69 (0.12)	2.02 (0.21)	2.24 (0.28)	0.9	92.7	(4.7)
Male	9-13	277	2.10 (0.17)	1.20 (0.19)	1.37 (0.19)	1.70 (0.20)	2.15 (0.23)	2.71 (0.28)	3.33 (0.35)	3.75 (0.42)	1.2	94.9	(4.2)
	14-18	339	2.68 (0.17)	1.39 (0.26) <sup>E</sup>	1.61 (0.25)	2.05 (0.23)	2.66 (0.22)	3.42 (0.28)	4.27 (0.41)	4.86 (0.54)	1.6	90.4	(5.4)
	19-30	237	2.43 (0.15)	1.44 (0.15)	1.63 (0.17)	1.98 (0.20)	2.43 (0.23)	2.98 (0.28)	3.60 (0.37)	4.06 (0.48)	1.6	90.8	(5.7)
	31-50	423	2.12 (0.17)	1.00 (0.22) <sup>E</sup>	1.19 (0.21) <sup>E</sup>	1.55 (0.20)	2.05 (0.20)	2.65 (0.25)	3.30 (0.36)	3.77 (0.47)	1.6	72.6	(10.1)
	51-70	387	2.29 (0.15)	1.13 (0.16)	1.31 (0.16)	1.65 (0.16)	2.14 (0.18)	2.77 (0.24)	3.50 (0.34)	4.02 (0.44)	1.6	77.4	(8.0)
	>70	132	1.77 (0.17)	0.94 (0.25) <sup>E</sup>	1.10 (0.24) <sup>E</sup>	1.40 (0.22)	1.81 (0.23)	2.28 (0.29)	2.78 (0.40)	3.12 (0.50)	1.6	63.1	(14.9) <sup>E</sup>
	19+	1179	2.21 (0.09)	1.16 (0.11)	1.33 (0.11)	1.67 (0.11)	2.14 (0.12)	2.73 (0.15)	3.38 (0.21)	3.85 (0.28)	1.6	78.6	(5.4)
Female	9-13	281	1.63 (0.09)	0.84 (0.14)	0.96 (0.13)	1.20 (0.12)	1.52 (0.11)	1.92 (0.14)	2.37 (0.21)	2.69 (0.28)	1.0	88.1	(6.0)
	14-18	321	1.95 (0.18)	1.34 (0.29) <sup>E</sup>	1.48 (0.29) <sup>E</sup>	1.74 (0.28)	2.09 (0.29)	2.50 (0.35)	2.93 (0.46)	3.23 (0.58) <sup>E</sup>	1.1	99.2	(5.8)
	19-30	249	2.00 (0.22)	0.92 (0.10)	1.05 (0.11)	1.31 (0.14)	1.71 (0.21)	2.28 (0.32)	3.00 (0.49)	3.54 (0.65) <sup>E</sup>	1.1	87.6	(6.0)
	31-50	364	1.81 (0.10)	1.07 (0.08)	1.20 (0.09)	1.47 (0.11)	1.85 (0.14)	2.31 (0.18)	2.80 (0.25)	3.13 (0.30)	1.1	94.0	(2.8)
	51-70	467	1.81 (0.11)	0.88 (0.17) <sup>E</sup>	1.03 (0.16)	1.32 (0.14)	1.74 (0.12)	2.26 (0.16)	2.85 (0.27)	3.26 (0.35)	1.1	86.9	(6.0)
	>70	215	1.30 (0.09)	0.93 (0.16) <sup>E</sup>	0.99 (0.15)	1.11 (0.14)	1.26 (0.13)	1.43 (0.14)	1.60 (0.18)	1.72 (0.22)	1.1	77.0	(18.3) <sup>E</sup>
	19+	1295	1.78 (0.07)	1.05 (0.10)	1.18 (0.10)	1.43 (0.09)	1.76 (0.08)	2.18 (0.11)	2.63 (0.17)	2.94 (0.23)	1.1	93.3	(3.4)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> Linolenic acid is an alternative name for  $\alpha$ -linolenic acid (n-3).

<sup>3</sup> AI is the Adequate Intake. For additional detail, see footnote 10 in Appendix A.

For additional footnotes common to all tables, see Appendix A.

**Table 31.5 Percentage of total energy intake from linolenic acid, by DRI age–sex group, household population, Quebec, 2004<sup>1–3</sup>**

Sex	Age (years)	Percentiles (and <i>SE</i> ) of usual intake								
		n	Mean ( <i>SE</i> )	5th ( <i>SE</i> )	10th ( <i>SE</i> )	25th ( <i>SE</i> )	50th ( <i>SE</i> )	75th ( <i>SE</i> )	90th ( <i>SE</i> )	95th ( <i>SE</i> )
Both	1-3	311	0.49 (0.02)	0.33 (0.03)	0.36 (0.03)	0.41 (0.02)	0.48 (0.02)	0.56 (0.03)	0.64 (0.05)	0.70 (0.06)
	4-8	485	0.61 (0.03)	0.45 (0.02)	0.48 (0.02)	0.53 (0.03)	0.59 (0.03)	0.67 (0.04)	0.74 (0.04)	0.79 (0.05)
Male	9-13	277	0.68 (0.04)	0.43 (0.05)	0.48 (0.05)	0.56 (0.05)	0.68 (0.05)	0.82 (0.07)	0.98 (0.11)	1.09 (0.13)
	14-18	339	0.74 (0.04)	0.43 (0.06)	0.48 (0.06)	0.58 (0.05)	0.71 (0.05)	0.86 (0.07)	1.02 (0.10)	1.13 (0.12)
	19-30	237	0.78 (0.05)	0.50 (0.04)	0.55 (0.05)	0.65 (0.06)	0.78 (0.07)	0.94 (0.10)	1.13 (0.14)	1.26 (0.18)
	31-50	423	0.68 (0.03)	0.53 (0.07)	0.56 (0.07)	0.62 (0.05)	0.69 (0.04)	0.76 (0.05)	0.83 (0.07)	0.88 (0.09)
	51-70	387	0.86 (0.04)	0.56 (0.07)	0.61 (0.07)	0.71 (0.06)	0.84 (0.05)	0.99 (0.07)	1.14 (0.10)	1.24 (0.13)
	>70	132	0.79 (0.05)	0.50 (0.05)	0.55 (0.05)	0.65 (0.06)	0.78 (0.07)	0.94 (0.09)	1.11 (0.11)	1.24 (0.14)
	19+	1179	0.76 (0.02)	0.58 (0.06)	0.61 (0.05)	0.68 (0.04)	0.76 (0.03)	0.86 (0.04)	0.95 (0.06)	1.02 (0.08)
Female	9-13	281	0.66 (0.03)	0.44 (0.06)	0.48 (0.05)	0.55 (0.04)	0.64 (0.04)	0.75 (0.05)	0.86 (0.08)	0.93 (0.10)
	14-18	321	0.76 (0.07)	0.65 (0.12) <sup>E</sup>	0.67 (0.11) <sup>E</sup>	0.72 (0.10)	0.79 (0.09)	0.85 (0.10)	0.92 (0.13)	0.97 (0.15)
	19-30	249	0.79 (0.06)	0.55 (0.09)	0.59 (0.09)	0.65 (0.08)	0.74 (0.07)	0.85 (0.09)	0.96 (0.13)	1.04 (0.16)
	31-50	364	0.80 (0.04)	0.62 (0.08)	0.65 (0.07)	0.72 (0.06)	0.81 (0.05)	0.90 (0.06)	1.00 (0.10)	1.06 (0.13)
	51-70	467	0.87 (0.04)	0.54 (0.09)	0.60 (0.08)	0.71 (0.06)	0.85 (0.05)	1.02 (0.07)	1.22 (0.12)	1.35 (0.16)
	>70	215	0.77 (0.05)	0.56 (0.08)	0.60 (0.08)	0.67 (0.07)	0.76 (0.06)	0.86 (0.08)	0.96 (0.10)	1.03 (0.13)
	19+	1295	0.81 (0.03)	0.55 (0.04)	0.60 (0.04)	0.69 (0.03)	0.80 (0.03)	0.94 (0.04)	1.09 (0.06)	1.19 (0.08)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> Linolenic acid is an alternative name for  $\alpha$ -linolenic acid (n-3).

<sup>3</sup> AMDR is the Acceptable Macronutrient Distribution Range. For additional detail, see footnote 8 in Appendix A.

For additional footnotes common to all tables, see Appendix A.

**Table 32.5 Moisture (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles (and SE) of usual intake						AI <sup>3</sup>	% >AI	(SE)
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)		
Both	1-3	311	1407	(47)	826 (78)	949 (74)	1156 (68)	1395 (63)	1657 (65)	1934 (84)	2124 (106)	1300	60.4 (7.1)
	4-8	485	1610	(59)	987 (50)	1098 (50)	1308 (52)	1578 (61)	1896 (85)	2244 (126)	2494 (162)	1700	39.3 (5.9)
Male	9-13	277	2163	(92)	1330 (139)	1503 (127)	1805 (115)	2177 (118)	2623 (142)	3124 (195)	3484 (248)	2400	36.1 (7.3) <sup>E</sup>
	14-18	339	2881	(150)	1636 (138)	1826 (151)	2258 (168)	2917 (187)	3703 (231)	4574 (316)	5204 (394)	3300	36.6 (6.9) <sup>E</sup>
	19-30	237	3489	(173)	2067 (234)	2345 (222)	2864 (198)	3526 (199)	4286 (251)	5058 (348)	5563 (430)	3700	43.6 (7.9) <sup>E</sup>
	31-50	423	2981	(81)	1952 (117)	2138 (106)	2475 (96)	2898 (99)	3400 (123)	3949 (175)	4335 (225)	3700	15.4 (4.0) <sup>E</sup>
	51-70	387	2805	(81)	1715 (114)	1938 (109)	2334 (103)	2744 (104)	3227 (137)	3782 (182)	4107 (207)	3700	11.6 (3.8) <sup>E</sup>
	>70	132	2325	(164)	1461 (227)	1635 (210)	1955 (188)	2359 (188)	2818 (226)	3281 (283)	3582 (325)	3700	<sup>F</sup>
	19+	1179	2985	(57)	1750 (74)	1984 (69)	2389 (65)	2898 (70)	3550 (87)	4234 (110)	4681 (135)	3700	20.8 (2.4)
Female	9-13	281	1811	(111)	1103 (88)	1205 (80)	1395 (79)	1677 (93)	2051 (141)	2477 (230)	2798 (319)	2100	<sup>F</sup>
	14-18	321	2154	(108)	1240 (117)	1403 (115)	1704 (119)	2092 (132)	2567 (161)	3104 (214)	3490 (267)	2300	37.7 (8.1) <sup>E</sup>
	19-30	249	2631	(97)	1733 (99)	1900 (100)	2212 (108)	2620 (127)	3106 (159)	3636 (208)	3996 (245)	2700	45.2 (7.9) <sup>E</sup>
	31-50	364	2794	(104)	1698 (106)	1887 (101)	2241 (98)	2700 (107)	3236 (139)	3856 (205)	4332 (277)	2700	50.0 (6.2)
	51-70	467	2511	(73)	1455 (83)	1649 (78)	2003 (76)	2451 (84)	2988 (106)	3589 (153)	4017 (198)	2700	37.0 (4.5)
	>70	215	2006	(91)	1321 (113)	1437 (110)	1661 (111)	1958 (115)	2321 (139)	2716 (199)	2987 (257)	2700	<sup>F</sup>
	19+	1295	2581	(51)	1551 (46)	1727 (47)	2071 (51)	2537 (61)	3084 (77)	3695 (113)	4143 (150)	2700	41.5 (3.2)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> The term “moisture” includes water from all food and beverage sources.

<sup>3</sup> AI is the Adequate Intake. For additional detail, see footnote 10 in Appendix A.

For additional footnotes common to all tables, see Appendix A.

**Table 33.5 Naturally occurring folate (µg/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles (and SE) of usual intake						
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both	1-3	311	148	(8)	72	86	112	143	180	220	247
	4-8	485	187	(9)	114	128	153	184	222	264	293
Male	9-13	277	225	(13)	146	161	189	225	266	309	338
	14-18	339	240	(12)	118	139	181	239	307	383	440
	19-30	237	286	(14)	177	200	243	295	353	412	452
	31-50	423	272	(9)	164	185	220	266	323	384	428
	51-70	387	259	(14)	141	161	199	252	319	404	476
	>70	132	215	(16)	98	116	154	204	263	329	380
	19+	1179	266	(7)	149	171	210	262	327	400	454
	9-13	281	185	(9)	102	115	140	173	212	253	281
Female	14-18	321	211	(11)	130	145	173	208	248	289	316
	19-30	249	255	(26)	145	161	192	235	286	344	384
	31-50	364	241	(24)	148	163	193	237	289	345	386
	51-70	467	227	(9)	120	139	174	219	277	344	391
	>70	215	189	(13)	98	113	141	180	235	307	366
	19+	1295	233	(11)	127	144	175	226	287	357	410

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for naturally occurring folate.

For additional footnotes common to all tables, see Appendix A.

**Table 34.5 Protein (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	Percentiles (and SE) of usual intake								
		n	Mean (SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both	1-3	311	62 (3)	44 (7)	48 (6)	55 (5)	63 (4)	72 (4)	80 (5)	86 (6)
	4-8	485	75 (3)	53 (6)	57 (5)	64 (4)	74 (3)	84 (4)	93 (6)	99 (8)
Male	9-13	277	103 (6)	76 (11)	82 (10)	94 (9)	108 (8)	124 (10)	140 (15)	151 (18)
	14-18	339	117 (6)	72 (8)	81 (7)	98 (7)	119 (8)	147 (10)	179 (15)	201 (19)
	19-30	237	103 (5)	89 (12)	93 (11)	99 (8)	106 (7)	114 (8)	121 (12)	125 (15)
	31-50	423	105 (5)	67 (8)	74 (8)	87 (6)	104 (6)	124 (7)	144 (11)	158 (14)
	51-70	387	91 (3)	58 (7)	65 (6)	76 (5)	90 (4)	105 (5)	122 (7)	133 (9)
	>70	132	78 (5)	45 (8) <sup>E</sup>	51 (8)	61 (8)	75 (8)	92 (9)	111 (10)	124 (12)
	19+	1179	98 (3)	62 (4)	68 (4)	81 (3)	98 (3)	116 (4)	135 (5)	148 (7)
Female	9-13	281	77 (4)	48 (6)	53 (6)	62 (5)	74 (4)	87 (5)	101 (7)	110 (9)
	14-18	321	75 (3)	50 (4)	55 (3)	64 (3)	76 (4)	90 (5)	104 (6)	114 (8)
	19-30	249	79 (4)	58 (8)	62 (7)	70 (5)	79 (5)	88 (6)	97 (9)	103 (11)
	31-50	364	85 (5)	55 (9)	61 (8)	71 (7)	85 (6)	101 (7)	118 (10)	130 (13)
	51-70	467	76 (3)	54 (6)	59 (5)	67 (4)	76 (3)	87 (4)	97 (7)	104 (9)
	>70	215	62 (2)	45 (4)	48 (4)	54 (4)	62 (4)	70 (4)	78 (6)	83 (7)
	19+	1295	78 (2)	51 (3)	57 (3)	66 (3)	78 (3)	92 (3)	106 (4)	115 (5)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> Although DRIs for protein have been established on a “per kg body weight” basis, no DRIs have been established for the absolute amount of protein.

For additional footnotes common to all tables, see Appendix A.

**Table 35.5 Total carbohydrates (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles (and SE) of usual intake						EAR <sup>2</sup>	% <EAR <sup>2</sup>	(SE)
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)		
Both	1-3	311	211	(8)	121 (11)	140 (11)	172 (11)	211 (11)	256 (13)	304 (18)	335 (21)	100	<sup>F</sup>
	4-8	485	270	(7)	203 (16)	218 (13)	243 (9)	274 (8)	308 (13)	341 (20)	362 (25)	100	<3
Male	9-13	277	369	(15)	239 (22)	265 (22)	317 (22)	383 (24)	454 (28)	526 (34)	575 (39)	100	<3
	14-18	339	421	(17)	259 (23)	293 (22)	355 (21)	438 (21)	529 (25)	619 (35)	688 (46)	100	0.0 (0.0)
	19-30	237	360	(14)	250 (33)	272 (29)	311 (23)	360 (20)	413 (27)	463 (40)	494 (49)	100	0.0 (0.0)
	31-50	423	319	(15)	191 (25)	215 (23)	262 (20)	320 (18)	382 (21)	441 (32)	480 (39)	100	<3
	51-70	387	269	(8)	175 (15)	194 (13)	227 (11)	266 (10)	313 (13)	358 (18)	386 (22)	100	<3
	>70	132	240	(14)	124 (28) <sup>E</sup>	146 (26) <sup>E</sup>	188 (22)	240 (20)	299 (21)	358 (25)	395 (29)	100	<sup>F</sup>
	19+	1179	307	(8)	178 (10)	201 (10)	247 (10)	305 (10)	369 (11)	433 (15)	477 (19)	100	<3
Female	9-13	281	296	(12)	182 (17)	203 (16)	242 (14)	289 (13)	341 (15)	390 (19)	422 (23)	100	<3
	14-18	321	282	(9)	190 (12)	210 (11)	246 (11)	290 (12)	339 (15)	386 (18)	416 (21)	100	<3
	19-30	249	274	(14)	178 (19)	196 (17)	229 (16)	269 (16)	313 (21)	356 (27)	383 (31)	100	<3
	31-50	364	238	(10)	156 (11)	171 (10)	196 (10)	232 (12)	281 (16)	334 (24)	375 (34)	100	<3
	51-70	467	227	(6)	132 (10)	150 (9)	181 (8)	221 (7)	269 (10)	321 (16)	357 (21)	100	<3
	>70	215	193	(7)	132 (12)	145 (12)	167 (11)	191 (10)	216 (11)	242 (13)	260 (15)	100	<3
	19+	1295	236	(5)	144 (6)	162 (5)	191 (5)	229 (6)	278 (8)	331 (12)	369 (15)	100	<3

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> EAR is the Estimated Average Requirement. For additional detail, see footnote 9 in Appendix A.

For additional footnotes common to all tables, see Appendix A.

**Table 36.5 Total fats (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	Percentiles (and SE) of usual intake								
		n	Mean (SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both	1-3	311	57 (2)	34 (4)	39 (3)	48 (3)	58 (3)	70 (4)	82 (5)	89 (6)
	4-8	485	74 (3)	45 (4)	51 (4)	60 (3)	72 (3)	87 (4)	101 (6)	111 (7)
Male	9-13	277	101 (5)	65 (7)	72 (7)	86 (7)	104 (7)	125 (10)	146 (13)	160 (15)
	14-18	339	117 (5)	76 (9)	84 (8)	100 (7)	120 (6)	146 (8)	174 (13)	194 (18)
	19-30	237	101 (4)	74 (9)	80 (8)	89 (7)	101 (7)	114 (8)	127 (10)	135 (12)
	31-50	423	100 (6)	53 (8)	61 (8)	76 (7)	97 (7)	121 (9)	145 (13)	162 (16)
	51-70	387	88 (4)	46 (6)	53 (6)	66 (5)	84 (5)	104 (6)	126 (8)	142 (10)
	>70	132	73 (5)	35 (8) <sup>E</sup>	42 (8) <sup>E</sup>	56 (8)	73 (8)	93 (9)	112 (11)	124 (13)
	19+	1179	94 (3)	51 (3)	59 (3)	73 (3)	92 (4)	114 (5)	137 (6)	153 (7)
Female	9-13	281	80 (4)	49 (5)	55 (5)	65 (5)	78 (5)	93 (6)	107 (7)	117 (8)
	14-18	321	81 (4)	54 (7)	60 (7)	71 (6)	85 (6)	99 (8)	113 (10)	122 (12)
	19-30	249	76 (5)	42 (4)	49 (4)	59 (4)	73 (5)	88 (7)	104 (8)	114 (9)
	31-50	364	75 (4)	49 (7)	54 (6)	63 (6)	76 (5)	92 (6)	108 (9)	119 (12)
	51-70	467	68 (3)	39 (5)	45 (5)	55 (4)	68 (3)	82 (4)	96 (6)	105 (7)
	>70	215	54 (3)	37 (5)	40 (4)	46 (4)	53 (4)	62 (5)	71 (6)	76 (7)
	19+	1295	71 (2)	44 (3)	49 (3)	58 (2)	70 (2)	85 (3)	100 (4)	110 (6)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for the absolute amount of total fats.

For additional footnotes common to all tables, see Appendix A.

**Table 37.5 Total monounsaturated fats (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean (SE)	Percentiles (and SE) of usual intake						
				5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both	1-3	311	20.1 (0.9)	11.2 (1.3)	13.0 (1.3)	16.3 (1.2)	20.3 (1.3)	24.8 (1.6)	29.4 (2.1)	32.5 (2.5)
	4-8	485	28.1 (1.0)	16.8 (1.8)	19.2 (1.6)	23.2 (1.3)	27.5 (1.3)	33.6 (1.6)	39.1 (2.0)	42.1 (2.3)
Male	9-13	277	39.0 (2.3)	24.5 (3.1)	27.4 (3.0)	33.0 (2.9)	40.2 (3.1)	48.5 (3.9)	57.3 (5.2)	63.1 (6.2)
	14-18	339	46.1 (2.1)	29.5 (4.0)	32.7 (3.8)	39.0 (3.3)	47.5 (3.0)	57.4 (3.7)	67.7 (5.6)	74.9 (7.4)
	19-30	237	40.9 (1.7)	27.5 (2.3)	30.2 (2.4)	35.0 (2.7)	40.8 (3.1)	47.3 (3.5)	54.0 (3.9)	58.4 (4.2)
	31-50	423	39.7 (2.5)	20.2 (3.4) <sup>E</sup>	23.6 (3.2)	30.2 (3.0)	38.8 (3.1)	48.9 (4.1)	59.5 (5.8)	66.5 (7.2)
	51-70	387	35.3 (1.7)	17.4 (2.3)	20.2 (2.2)	25.6 (2.1)	33.0 (2.0)	42.3 (2.4)	52.4 (3.4)	59.3 (4.4)
	>70	132	28.9 (2.2)	15.1 (3.8) <sup>E</sup>	17.8 (3.6) <sup>E</sup>	22.9 (3.3)	29.1 (3.2)	35.9 (3.6)	42.8 (4.5)	47.4 (5.3)
	19+	1179	37.8 (1.2)	19.8 (1.4)	23.0 (1.4)	29.1 (1.4)	37.0 (1.5)	46.3 (1.9)	56.0 (2.5)	62.7 (3.1)
Female	9-13	281	30.5 (1.6)	18.8 (2.1)	20.9 (2.0)	24.7 (1.8)	29.4 (1.8)	34.7 (2.2)	40.3 (3.0)	44.0 (3.6)
	14-18	321	31.7 (1.7)	21.3 (3.0)	23.6 (2.8)	27.8 (2.5)	33.0 (2.6)	38.6 (3.3)	44.0 (4.4)	47.5 (5.3)
	19-30	249	30.0 (1.9)	22.4 (3.4)	23.8 (3.1)	26.3 (2.5)	29.3 (2.3)	32.6 (2.8)	35.7 (3.9)	37.7 (4.7)
	31-50	364	29.8 (1.4)	18.4 (2.6)	20.5 (2.4)	24.4 (2.1)	29.8 (1.9)	36.3 (2.3)	43.1 (3.5)	47.7 (4.6)
	51-70	467	27.0 (1.2)	14.8 (2.0)	17.1 (1.8)	21.4 (1.5)	26.9 (1.3)	33.0 (1.7)	39.1 (2.5)	43.0 (3.1)
	>70	215	20.5 (1.0)	14.3 (2.1)	15.5 (2.0)	17.7 (1.8)	20.4 (1.7)	23.6 (1.9)	26.8 (2.7)	28.9 (3.4)
	19+	1295	27.8 (0.7)	17.1 (1.2)	19.2 (1.1)	23.0 (1.0)	27.8 (0.9)	33.3 (1.1)	39.1 (1.6)	42.9 (2.1)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for total monounsaturated fats.

For additional footnotes common to all tables, see Appendix A.

**Table 38.5 Total polyunsaturated fats (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	Percentiles (and SE) of usual intake								
		n	Mean (SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both	1-3	311	7.0 (0.3)	3.9 (0.5)	4.5 (0.5)	5.6 (0.5)	7.0 (0.5)	8.5 (0.6)	10.1 (0.8)	11.2 (1.0)
	4-8	485	10.6 (0.4)	6.2 (0.6)	7.0 (0.6)	8.4 (0.5)	10.6 (0.5)	13.1 (0.7)	15.7 (1.1)	17.5 (1.5)
Male	9-13	277	16.1 (1.0)	9.9 (1.3)	11.2 (1.3)	13.6 (1.3)	16.8 (1.4)	20.5 (1.8)	24.7 (2.4)	27.6 (2.9)
	14-18	339	17.6 (0.8)	11.2 (1.6)	12.4 (1.5)	14.8 (1.3)	17.8 (1.2)	21.4 (1.4)	25.3 (2.2)	28.0 (2.9)
	19-30	237	17.4 (0.9)	13.4 (1.9)	14.2 (1.7)	15.7 (1.5)	17.6 (1.4)	19.7 (1.7)	21.8 (2.3)	23.2 (2.8)
	31-50	423	16.1 (1.2)	8.9 (1.5) <sup>E</sup>	10.2 (1.5)	12.6 (1.4)	15.8 (1.4)	19.5 (1.7)	23.5 (2.4)	26.2 (3.0)
	51-70	387	15.0 (0.6)	7.1 (0.8)	8.4 (0.8)	10.8 (0.7)	13.9 (0.8)	18.2 (1.0)	22.9 (1.3)	26.0 (1.7)
	>70	132	12.5 (0.9)	7.4 (1.6) <sup>E</sup>	8.5 (1.5) <sup>E</sup>	10.5 (1.4)	13.1 (1.3)	15.9 (1.4)	18.5 (1.7)	20.2 (2.0)
	19+	1179	15.8 (0.6)	8.6 (0.7)	9.9 (0.6)	12.3 (0.7)	15.4 (0.7)	19.2 (0.9)	23.3 (1.3)	26.2 (1.5)
Female	9-13	281	12.8 (0.7)	7.9 (1.0)	8.8 (1.0)	10.4 (0.8)	12.4 (0.8)	14.9 (1.1)	17.7 (1.6)	19.6 (2.1)
	14-18	321	13.9 (1.0)	10.3 (1.7)	11.2 (1.6)	12.8 (1.5)	14.9 (1.4)	17.2 (1.7)	19.5 (2.3)	21.0 (2.7)
	19-30	249	12.9 (0.9)	7.5 (0.7)	8.4 (0.7)	10.0 (0.8)	12.1 (0.9)	14.5 (1.2)	17.2 (1.4)	18.9 (1.6)
	31-50	364	12.8 (0.8)	9.2 (1.4)	9.9 (1.3)	11.3 (1.1)	13.1 (1.0)	15.4 (1.4)	17.9 (2.4)	19.6 (3.4) <sup>E</sup>
	51-70	467	12.3 (0.6)	6.2 (0.8)	7.3 (0.8)	9.4 (0.7)	12.0 (0.6)	15.0 (0.8)	18.2 (1.2)	20.3 (1.5)
	>70	215	9.9 (0.6)	7.1 (1.2)	7.6 (1.1)	8.6 (1.0)	9.9 (1.0)	11.4 (1.2)	13.0 (1.6)	14.1 (2.1)
	19+	1295	12.3 (0.4)	7.9 (0.6)	8.7 (0.5)	10.2 (0.5)	12.2 (0.4)	14.7 (0.6)	17.3 (1.1)	19.2 (1.5)

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for total polyunsaturated fats.

For additional footnotes common to all tables, see Appendix A.

**Table 39.5 Total saturated fats (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles (and SE) of usual intake													
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)							
Both	1-3	311	23.9	(1.0)	11.2	(1.3)	13.7	(1.3)	18.3	(1.3)	24.1	(1.4)	30.6	(1.6)	37.3	(2.2)	41.8	(2.6)
	4-8	485	27.8	(1.3)	15.6	(1.6)	17.7	(1.5)	21.5	(1.4)	26.8	(1.4)	33.1	(2.3)	39.2	(3.3)	43.4	(4.0)
Male	9-13	277	35.4	(1.8)	21.1	(2.5)	23.9	(2.4)	29.3	(2.3)	36.2	(2.6)	43.9	(3.4)	51.2	(4.3)	55.7	(4.9)
	14-18	339	41.8	(2.2)	25.8	(1.5)	28.7	(1.6)	34.2	(1.9)	42.0	(2.7)	52.4	(3.8)	64.5	(5.0)	73.0	(5.8)
	19-30	237	33.3	(1.8)	22.2	(3.5)	24.2	(3.2)	27.9	(2.7)	32.3	(2.5)	37.4	(3.1)	42.6	(4.3)	46.1	(5.2)
	31-50	423	35.2	(2.1)	18.8	(3.0)	21.5	(2.8)	26.5	(2.5)	33.3	(2.5)	41.8	(3.4)	50.9	(5.0)	57.1	(6.3)
	51-70	387	30.1	(1.9)	13.4	(2.5) <sup>E</sup>	15.8	(2.5)	20.8	(2.3)	27.8	(2.2)	36.2	(2.8)	45.9	(4.3)	52.8	(5.7)
	>70	132	25.7	(2.3)	9.5	(2.6) <sup>E</sup>	11.9	(2.7) <sup>E</sup>	16.8	(2.8)	23.7	(3.1)	32.5	(4.0)	42.0	(5.5)	48.6	(6.7)
	19+	1179	32.5	(1.1)	16.0	(1.3)	18.7	(1.3)	23.9	(1.2)	30.7	(1.3)	39.2	(1.7)	48.8	(2.3)	55.3	(2.9)
	Female	9-13	281	28.9	(1.8)	16.7	(2.4)	18.9	(2.3)	22.9	(2.1)	28.0	(2.0)	33.7	(2.4)	39.3	(3.1)	43.0
14-18	321	26.7	(1.5)	17.0	(2.4)	18.9	(2.3)	22.4	(2.1)	27.1	(2.0)	32.6	(2.5)	38.2	(3.4)	41.9	(4.1)	
19-30	249	26.2	(1.9)	13.7	(2.2)	15.8	(2.1)	19.9	(1.9)	25.2	(2.1)	31.5	(3.0)	38.2	(4.5)	42.5	(5.6)	
31-50	364	25.9	(1.7)	17.3	(3.4) <sup>E</sup>	19.0	(3.2) <sup>E</sup>	22.3	(2.8)	26.6	(2.4)	31.5	(2.5)	36.6	(3.3)	39.9	(4.3)	
51-70	467	22.0	(0.9)	12.1	(1.9)	14.1	(1.7)	17.7	(1.3)	22.1	(1.1)	27.0	(1.4)	31.9	(2.1)	35.2	(2.8)	
>70	215	18.3	(1.0)	11.9	(1.7)	13.1	(1.6)	15.3	(1.5)	18.2	(1.5)	21.6	(1.7)	25.2	(2.2)	27.5	(2.7)	
19+	1295	23.9	(0.8)	13.3	(1.1)	15.3	(1.1)	18.9	(1.1)	23.6	(1.1)	29.3	(1.3)	35.4	(1.7)	39.6	(2.1)	

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for total saturated fats.

For additional footnotes common to all tables, see Appendix A.

**Table 40.5 Total sugars (g/d): Usual intakes from food, by DRI age–sex group, household population, Quebec, 2004<sup>1,2</sup>**

Sex	Age (years)	Percentiles (and SE) of usual intake								
		n	Mean (SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both										
	1-3	311	108 (5)	51 (6)	62 (6)	81 (6)	106 (6)	135 (8)	167 (11)	190 (13)
	4-8	485	125 (4)	79 (10)	88 (8)	105 (6)	125 (5)	147 (7)	168 (11)	181 (13)
Male	9-13	277	172 (8)	102 (14)	117 (13)	143 (13)	178 (14)	218 (17)	259 (22)	286 (25)
	14-18	339	194 (12)	106 (15)	124 (14)	156 (13)	196 (14)	243 (18)	295 (24)	330 (30)
	19-30	237	149 (8)	84 (14) <sup>E</sup>	95 (13)	117 (11)	145 (11)	176 (14)	207 (20)	228 (24)
	31-50	423	132 (8)	68 (12) <sup>E</sup>	80 (11)	102 (10)	131 (9)	165 (12)	200 (19)	224 (24)
	51-70	387	109 (4)	52 (4)	62 (4)	81 (5)	106 (5)	135 (6)	165 (7)	184 (8)
	>70	132	98 (7)	42 (9) <sup>E</sup>	52 (9) <sup>E</sup>	72 (9)	100 (10)	134 (13)	165 (16)	187 (20)
	19+	1179	126 (4)	56 (4)	67 (4)	91 (4)	122 (5)	160 (7)	202 (9)	230 (12)
	Female									
9-13	281	132 (5)	78 (6)	89 (6)	108 (6)	131 (7)	156 (7)	180 (9)	196 (10)	
14-18	321	127 (5)	80 (8)	90 (7)	108 (7)	130 (7)	154 (8)	178 (11)	194 (13)	
19-30	249	113 (7)	57 (5)	68 (6)	88 (7)	114 (9)	146 (11)	178 (13)	198 (15)	
31-50	364	99 (7)	47 (7)	55 (7)	72 (7)	94 (8)	123 (10)	158 (14)	185 (19)	
51-70	467	95 (4)	47 (4)	55 (4)	70 (4)	90 (4)	116 (6)	146 (10)	169 (14)	
>70	215	81 (4)	42 (7)	50 (6)	63 (6)	80 (6)	97 (7)	114 (9)	126 (11)	
19+	1295	98 (3)	48 (3)	56 (3)	72 (3)	95 (4)	123 (5)	155 (7)	178 (9)	

Data source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, Nutrition (2004) - Share File

**Symbol Legend**

<sup>E</sup> Data with a coefficient of variation (CV) from 16.6% to 33.3%; interpret with caution.

<3 Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval entirely between 0 and 3%; interpret with caution.

<sup>F</sup> Data with a coefficient of variation (CV) greater than 33.3% with a 95% confidence interval not entirely between 0 and 3%; suppressed due to extreme sampling variability.

**Footnotes**

<sup>1</sup> Intakes are based on food consumption only. For additional detail, see footnote 4 in Appendix A.

<sup>2</sup> No DRIs have been established for total sugars.

For additional footnotes common to all tables, see Appendix A.

## Appendix A: Table Footnotes

The following footnotes apply to all of the summary data tables presented in Section II of this report.

1. The survey excludes from its target population those living in the three territories, individuals living on Indian reserves or on Crown lands, residents of institutions, full-time members of the Canadian Forces and residents of certain remote regions.
2. The tables exclude pregnant and breastfeeding females, subject to another set of nutritional recommendations. The sample of pregnant and breastfeeding females is not large enough to allow for reliable estimates.
3. Sample size and mean intake are based on the first 24-hour dietary recall (first day of interview) only.
4. Intakes are based on food consumption only. Intakes from vitamin and mineral supplements are not included. Inferences about the prevalence of nutrient excess or inadequacy based on intakes from food alone may respectively underestimate or overestimate the prevalences based on total nutrient intakes from both food and supplements.
5. The intake distribution (percentiles and percentage above or below a cut-off when applicable) was adjusted to remove within-individual variability using Software for Intake Distribution Estimation (SIDE) (Iowa State University, 1996) and the method presented in Nusser SM, Carriquiry AL, Dodd KW, Fuller WA: A semiparametric transformation approach to estimating usual daily intake distributions. *J Am Stat Assoc* 1996; 91: 1440-1449.
6. In some cases, within-individual variance was estimated at the regional or national level and applied at the provincial level. For more details, see Section II.4: Measuring Sampling Variability with Bootstrap Replication in Volume 1 of the *Nutrient Intakes from Food* report series.
7. Bootstrapping techniques were used to produce the coefficient of variation (CV) and the standard error (SE).
8. AMDR is the Acceptable Macronutrient Distribution Range, expressed as a percentage of total energy intake. Intakes inside the range (shown in the AMDR columns) are associated with a reduced risk of chronic disease while providing adequate intakes of essential nutrients. For further information on AMDR see the Health Canada publication *Canadian Community Health Survey*,

*Cycle 2.2, Nutrition (2004)—A Guide to Accessing and Interpreting the Data*, Section 2.1.5, p. 27.

The applications of the AMDRs for essential fatty acids to group assessment are not the same as for the other macronutrients. The lower boundaries for the AMDR for linoleic and alpha-linolenic acids are not based on the same type of endpoints as the boundaries for total fat and carbohydrate. The boundaries for fat and carbohydrate are set based on evidence indicating increased risk for coronary heart diseases and the lower bound of the AMDR for both n-6 (linoleic) and n-3 (alpha-linolenic) fatty acids is based on the percent of energy from these fatty acids needed to provide the AI for these nutrients. The AI, in turn, is based on the median intake of both linoleic and alpha-linolenic acid in the United States, where essential fatty acid deficiency is non-existent in the healthy population.

Thus, by definition about half the population has intakes of these fatty acids below the AI and therefore outside the AMDR. In other words, based on the AI, one would conclude that the population is "adequate" with respect to linoleic and alpha-linolenic acids, while based on the AMDR a different conclusion (i.e. that 50% of the population has intakes below the AMDR) would be reached. Therefore, the lower bound of the AMDRs for linoleic and alpha-linolenic acids should not be used in the assessment of population intakes.

9. EAR is the Estimated Average Requirement. The level of intake at the EAR (shown in the EAR columns) is the average daily intake level that is estimated to meet the requirement, as defined by the specified indicator of adequacy, in half of the apparently healthy individuals in a DRI age–sex group. For further information on EAR see the Health Canada publication *Canadian Community Health Survey, Cycle 2.2, Nutrition (2004)—A Guide to Accessing and Interpreting the Data*, Section 2.1.1, p. 23.
10. AI is the Adequate Intake. The level of intake at the AI (shown in the AI columns) is the recommended average daily intake level based on observed or experimentally determined approximations or estimates of nutrient intake by a group or groups of apparently healthy people that are assumed to be adequate. It is developed when an EAR cannot be determined. The percentage of the population having a usual intake above the AI (shown in the %>AI columns) almost certainly meets their needs. The adequacy of intakes below the AI cannot be assessed, and should not be interpreted as being inadequate. For further information on AI see the Health Canada

publication *Canadian Community Health Survey, Cycle 2.2, Nutrition (2004)—A Guide to Accessing and Interpreting the Data*, Section 2.1.3, p. 25.

11. UL is the Tolerable Upper Intake Level. The level of intake at the UL (shown in the UL columns) is the highest average daily intake level that is likely to pose no risk of adverse health effects to almost all individuals in the general population. For further information on UL see the Health Canada publication *Canadian Community Health Survey, Cycle 2.2, Nutrition (2004)—A Guide to Accessing and Interpreting the Data*, Section 2.1.4, p. 26.
12. For a more detailed understanding of DRIs and their interpretation when assessing intakes of particular nutrients, consult the summary of the series of publications on DRIs published by the Institute of Medicine: *Dietary Reference Intakes: The Essential Guide to Nutrient Requirements*.
13. In terms of precision, the estimate 0.0 with a standard error of 0.0 refers to a standard error smaller than 0.1%.



## Appendix B: Justification for Excluding Nutrients from Volume 2 and Volume 3

Volume 1 of the compendium contained data on 13 nutrients, including 6 nutrients expressed as a percent of total energy. There were originally 31 nutrients scheduled to be released in Volumes 2 and 3 of the compendium, but for a variety of reasons some of these nutrients are not included. Decisions to omit these nutrients were made jointly by representatives from Statistics Canada and Health Canada.

Exclusions and changes to the list of nutrients that were to be included in Volumes 2 and 3 of the compendium are as follows:

### **Total milligrams of folic acid**

Folic acid is found in small amounts in a number of foods. Most respondents consumed a small amount of folic acid, which resulted in a bimodal distribution of folic acid intake. As a result, it was very difficult to normalize the distribution, which meant that SIDE was unable to calculate usual intake.

One of the steps that SIDE uses to estimate usual intake is to transform the data into a normal distribution. Assessing SIDE's ability to perform this transformation rests on measuring the Anderson-Darling (A-D) score for normality. The A-D score is a statistic that measures how close a distribution is to a normal distribution. Any A-D score less than 0.576 is considered to be sufficiently normal for SIDE to continue without warning. Typically, SIDE will be able to transform 95% of the domains without error using the default SIDE options. The remaining 5% of domains will typically score higher than 0.576 but usually less than 1.0. Adjusting the SIDE options will usually reduce the A-D to within the limit. In the case of folic acid, more than half of the provincial domains had an A-D score above the 0.576 threshold and many domains scored higher than 2. The nature of the data simply does not allow SIDE to produce proper estimates for the usual intake of folic acid.

### **Total grams of alcohol**

Alcohol is consumed differently than other nutrients. For most respondents, alcohol is not part of their daily intake of food, but rather is something that is consumed occasionally. In this sense, in terms of analysis, alcohol behaves more like a food than a nutrient. In order for SIDE to estimate the usual intake of foods, many recalls are needed to capture enough occurrences of the particular food. Thus, two recalls are not enough to calculate the usual intake of alcohol.

### Percent of energy from alcohol

The difficulty in estimating a usual intake for alcohol causes similar problems for expressing that intake as a percent of total energy.

### Caffeine

Caffeine also is consumed differently than other nutrients. The usual intake of caffeine could not be calculated due to the same issues as folic acid and alcohol. Many respondents reported zero or small levels of caffeine intake. Therefore, it is difficult for SIDE to properly model the data with only two dietary recalls.

Based on the changes above, the list of nutrients included in Volume 1 and the revised list of nutrients included in Volumes 2 and 3 are as follows:

List of Nutrients Included in the Three-Volume Set		
Volume 1	Volume 2	Volume 3
Total Energy	Folate (DFE)	Folacin
Percentage of total energy intake from fats	Iron	Linolenic acid (g, % energy)
Percentage of total energy intake from protein	Linoleic acid (g, % energy)	Moisture
Percentage of total energy intake from carbohydrates	Magnesium	Naturally occurring folate
Percentage of total energy intake from saturated fats	Niacin	Protein
Percentage of total energy intake from monounsaturated fats	Phosphorus	Total carbohydrates
Percentage of total energy intake from polyunsaturated fats	Potassium	Total fats
Total dietary fibre	Riboflavin	Total monounsaturated fats
Cholesterol	Thiamin	Total polyunsaturated fats
Vitamin A	Vitamin B <sub>6</sub>	Total saturated fats
Vitamin C	Vitamin B <sub>12</sub>	Total sugars
Calcium	Vitamin C by smoking status	
Sodium	Vitamin D	
	Zinc	

## Appendix C: References

Department of Statistics and Center for Agricultural and Rural Development, Iowa State University: *A User's Guide to SIDE, Software for Intake Distribution Estimation Version 1.0*. Technical Report 96-TR 30. Ames, IA: Iowa State University Statistical Laboratory, 1996. Available at:

[www.card.iastate.edu/publications/DBS/PDFFiles/96tr30.pdf](http://www.card.iastate.edu/publications/DBS/PDFFiles/96tr30.pdf)

Dodd KW: *A Technical Guide to C-SIDE, Software for Intake Distribution Estimation*. Technical Report 96-TR 32, Dietary Assessment Research Series Report 9. Ames, IA: Department of Statistics and Center for Agricultural and Rural Development, Iowa State University, 2006. Available at:

[www.card.iastate.edu/publications/DBS/PDFFiles/96tr32.pdf](http://www.card.iastate.edu/publications/DBS/PDFFiles/96tr32.pdf)

Health Canada: *Canadian Community Health Survey, Cycle 2.2, Nutrition (2004)—A Guide to Accessing and Interpreting the Data*. Ottawa: Publications, Health Canada, 2006. Available at: [www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/cchs\\_focus-volet\\_escc-eng.php](http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/cchs_focus-volet_escc-eng.php)

Institute of Medicine: *Dietary Reference Intakes: A Risk Assessment Model for Establishing Upper Intake Levels for Nutrients*. Washington, DC: National Academy Press, 1998. Available at: <http://books.nap.edu/catalog/6432.html>

Institute of Medicine: *Dietary Reference Intakes for Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Biotin and Choline*. Washington, DC: National Academy Press, 1998. Available at: [www.nap.edu/catalog.php?record\\_id=6015](http://www.nap.edu/catalog.php?record_id=6015)

Institute of Medicine: *Dietary Reference Intakes: Applications in Dietary Assessment*. Washington, DC: National Academy Press, 2000. Available at: <http://books.nap.edu/catalog/9956.html>

Institute of Medicine: *Dietary Reference Intakes: Applications in Dietary Planning*. Washington, DC: National Academy Press, 2003. Available at: <http://books.nap.edu/catalog/10609.html>

Institute of Medicine: *Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate*. Washington, DC: National Academy Press, 2004. Available at: <http://books.nap.edu/catalog/10925.html>

Institute of Medicine: *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids (Macronutrients)*. Washington, DC:

National Academy Press, 2005. Available at:

<http://books.nap.edu/catalog/10490.html>

Institute of Medicine: *Dietary Reference Intakes: The Essential Guide to Nutrient Requirements*. Washington, DC: National Academy Press, 2006.

Available at: [www.nap.edu/topics.php?topic=380](http://www.nap.edu/topics.php?topic=380)

Nusser SM, Carriquiry AL, Dodd KW, Fuller WA: A semiparametric transformation approach to estimating usual daily intake distributions. *J Am Stat Assoc* 1996; 91: 1440–1449

Nusser SM, Fuller WA, Guenther PM: Estimating usual dietary intake distributions: adjusting for measurement error and nonnormality in 24-hour food intake data. In L Lyberg, P Biemer, M Collins et al., eds. *Survey Measurement and Process Quality*, New York: John Wiley & Sons, 1997.

Statistics Canada: *Canadian Community Health Survey (CCHS) Cycle 2.2—Nutrition: Software for Intake Distribution Estimation (SIDE) Documentation*. Ottawa, 2007.

Available at: [www.statcan.ca/english/sdds/document/5049\\_D22\\_T9\\_V1\\_E.pdf](http://www.statcan.ca/english/sdds/document/5049_D22_T9_V1_E.pdf)