



Health  
Canada

Santé  
Canada

Statistics  
Canada

Statistique  
Canada

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

# Nutrient Intakes from Food

Provincial, Regional and National Summary Data Tables  
Volume 1

Revised March 31, 2008 and February 2009

**Note:** This PDF contains the 13 data tables for the Prairie Region, and the Appendices.

The full report is available at:

[www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/index-eng.php](http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/index-eng.php)



Canada 

# Table of Contents (for the full report)

	Acknowledgements .....	i
	List of Tables.....	v
	List of Appendices .....	xii
	List of Abbreviations.....	xiii
	Glossary .....	xiv
<b>I</b>	<b>Introduction .....</b>	<b>1</b>
<b>II</b>	<b>Methodology: Estimation with Software for Intake Distribution</b>	
	<b>Estimation (SIDE) .....</b>	<b>5</b>
	II.1 Introduction .....	5
	II.2 SIDE .....	6
	II.3 Using SIDE to Produce Tables from the CCHS Share File.....	7
	II.4 Measuring Sampling Variability with Bootstrap Replication.....	9
<b>III</b>	<b>Summary Data Tables.....</b>	<b>13</b>
	1. Total energy intake (kcal/d): Usual intakes from food .....	13
	2. Percentage of total energy intake from fats.....	27
	3. Percentage of total energy intake from protein .....	41
	4. Percentage of total energy intake from carbohydrates.....	55
	5. Percentage of total energy intake from saturated fats .....	69
	6. Percentage of total energy intake from monounsaturated fats .....	83
	7. Percentage of total energy intake from polyunsaturated fats .....	97
	8. Total dietary fibre (g/d): Usual intakes from food .....	111
	9. Cholesterol (mg/d): Usual intakes from food .....	125
	10. Vitamin A (RAE/d): Usual intakes from food.....	139
	11. Vitamin C (mg/d): Usual intakes from food .....	153
	12. Calcium (mg/d): Usual intakes from food.....	167
	13. Sodium (mg/d): Usual intakes from food.....	181

**Table 1.12 Total energy intake (kcal/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</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	622	1375 (30)	895 (51)	989 (48)	1163 (42)	1375 (40)	1595 (44)	1812 (56)	1963 (71)
	4-8	919	1837 (36)	1341 (81)	1431 (70)	1594 (52)	1799 (41)	2034 (61)	2268 (98)	2418 (125)
Male										
	9-13	579	2440 (73)	1796 (107)	1922 (99)	2156 (88)	2459 (87)	2809 (112)	3164 (157)	3394 (195)
	14-18	634	2902 (81)	1877 (140)	2090 (126)	2462 (108)	2913 (101)	3450 (121)	3982 (164)	4331 (209)
	19-30	578	2670 (76)	1543 (158)	1748 (146)	2139 (117)	2623 (94)	3141 (121)	3662 (198)	4016 (259)
	31-50	693	2432 (83)	1504 (127)	1684 (117)	2004 (103)	2418 (102)	2906 (149)	3411 (244)	3749 (316)
	51-70	596	2064 (55)	1210 (91)	1361 (88)	1664 (81)	2063 (74)	2476 (80)	2892 (109)	3181 (141)
	>70	296	1835 (50)	1152 (78)	1289 (69)	1524 (61)	1799 (63)	2111 (72)	2444 (96)	2674 (120)
	19+	2163	2346 (41)	1356 (55)	1535 (51)	1876 (49)	2321 (52)	2823 (60)	3353 (80)	3723 (99)
Female										
	9-13	533	2000 (57)	1398 (103)	1527 (96)	1756 (84)	2025 (79)	2310 (88)	2591 (112)	2773 (133)
	14-18	638	1975 (52)	1292 (71)	1424 (66)	1664 (63)	1962 (65)	2295 (77)	2628 (104)	2850 (130)
	19-30	499	1929 (66)	1147 (89)	1284 (85)	1541 (81)	1873 (84)	2258 (101)	2657 (133)	2920 (162)
	31-50	716	1783 (50)	1267 (133)	1373 (119)	1567 (95)	1806 (73)	2071 (79)	2335 (117)	2509 (153)
	51-70	745	1659 (40)	1142 (63)	1247 (56)	1432 (47)	1657 (45)	1907 (56)	2157 (82)	2322 (104)
	>70	510	1442 (40)	869 (45)	976 (47)	1176 (50)	1431 (53)	1724 (60)	2023 (75)	2219 (88)
	19+	2470	1739 (28)	1079 (38)	1201 (37)	1431 (37)	1725 (38)	2063 (43)	2414 (55)	2654 (68)

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.

**Footnote**

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

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

**Table 2.12 Percentage of total energy intake from fats, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake									AMDR <sup>2</sup>	% below AMDR	(SE)	% within AMDR	(SE)	% above AMDR	(SE)									
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)		95th (SE)														
Sex	Age (years)																									
Both																										
	1-3	622	30.4	(0.7)	23.7	(1.3)	25.1	(1.1)	27.5	(0.9)	30.3	(0.8)	33.1	(1.0)	35.8	(1.4)	37.3	(1.7)	30-40	47.3	(8.6) <sup>E</sup>	51.4	(8.2)		F	
	4-8	919	30.3	(0.4)	25.1	(1.4)	26.3	(1.1)	28.2	(0.7)	30.4	(0.5)	32.7	(0.7)	34.7	(1.1)	35.9	(1.4)	25-35		F	86.8	(7.0)		F	
Male																										
	9-13	579	30.7	(0.5)	23.8	(0.9)	25.2	(0.8)	27.8	(0.7)	30.7	(0.6)	33.7	(0.7)	36.5	(0.8)	38.3	(1.0)	25-35		F		74.0	(4.8)	17.0	(4.2) <sup>E</sup>
	14-18	634	31.4	(0.6)	26.4	(1.4)	27.5	(1.2)	29.3	(0.8)	31.3	(0.7)	33.4	(0.9)	35.3	(1.2)	36.5	(1.5)	25-35		F		86.6	(8.0)		F
	19-30	578	31.1	(0.7)	23.2	(1.9)	24.9	(1.6)	27.8	(1.1)	31.2	(0.8)	34.5	(1.1)	37.6	(1.6)	39.5	(2.0)	20-35	<3			76.8	(8.0)		F
	31-50	693	32.1	(0.9)	24.1	(2.4)	25.7	(2.0)	28.5	(1.4)	31.8	(1.1)	35.1	(1.5)	38.2	(2.1)	40.0	(2.6)	20-35		F		73.6	(10.8)		F
	51-70	596	31.5	(0.9)	25.3	(2.7)	26.8	(2.2)	29.2	(1.5)	31.9	(1.1)	34.7	(1.4)	37.1	(2.1)	38.6	(2.5)	20-35		F		77.3	(11.2)		F
	>70	296	31.7	(1.1)	21.8	(2.2)	23.7	(2.0)	27.1	(1.6)	31.0	(1.2)	35.0	(1.5)	38.8	(2.1)	41.1	(2.4)	20-35		F		72.6	(8.4)	25.0	(7.8) <sup>E</sup>
	19+	2163	31.7	(0.5)	22.6	(1.1)	24.6	(0.9)	27.9	(0.7)	31.7	(0.6)	35.5	(0.7)	38.9	(0.9)	41.0	(1.0)	20-35		F		70.3	(4.1)	28.1	(3.9)
Female																										
	9-13	533	29.4	(0.5)	24.9	(1.4)	25.8	(1.2)	27.3	(0.8)	29.1	(0.7)	30.9	(0.9)	32.5	(1.3)	33.5	(1.6)	25-35		F		93.1	(6.6)		F
	14-18	638	30.5	(0.5)	24.0	(1.3)	25.4	(1.1)	27.7	(0.8)	30.2	(0.7)	32.8	(0.9)	35.2	(1.2)	36.6	(1.5)	25-35		F		80.9	(7.5)		F
	19-30	499	30.8	(0.9)	24.3	(2.1)	25.7	(1.8)	28.1	(1.4)	30.8	(1.1)	33.5	(1.2)	35.9	(1.6)	37.4	(2.0)	20-35	<3			85.0	(8.5)		F
	31-50	716	33.0	(0.6)	27.5	(2.0)	28.7	(1.7)	30.7	(1.2)	32.9	(0.9)	35.1	(1.1)	37.0	(1.6)	38.2	(1.9)	20-35	<3			74.0	(11.6)		F
	51-70	745	32.5	(0.6)	26.6	(2.2)	27.9	(1.9)	30.0	(1.5)	32.4	(0.7)	34.8	(1.7)	37.0	(2.9)	38.3	(3.7)	20-35		F		76.6	(10.6)		F
	>70	510	29.4	(0.6)	21.5	(1.2)	23.1	(1.1)	25.9	(0.9)	29.1	(0.8)	32.4	(0.9)	35.4	(1.1)	37.2	(1.2)	20-35		F		86.2	(4.7)		F
19+	2470	32.0	(0.4)	24.7	(0.9)	26.3	(0.7)	28.9	(0.6)	31.9	(0.5)	35.0	(0.6)	37.6	(0.7)	39.2	(0.8)	20-35	<3			74.9	(4.1)	24.8	(4.1)	

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> 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 3.12 Percentage of total energy intake from protein, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake									AMDR <sup>2</sup>	% below AMDR ( <i>SE</i> )	% within AMDR ( <i>SE</i> )	% above AMDR ( <i>SE</i> )
		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> )			
Sex	Age (years)													
Both														
	1-3	622	14.6	(0.3)	10.6 (0.5)	11.4 (0.5)	12.8 (0.4)	14.5 (0.3)	16.3 (0.4)	18.0 (0.6)	19.1 (0.7)	5-20	0.0 (0.0)	97.3 (1.5) F
	4-8	919	14.1	(0.2)	11.2 (0.2)	11.8 (0.2)	12.8 (0.2)	14.1 (0.2)	15.4 (0.3)	16.7 (0.3)	17.6 (0.3)	10-30	<3	99.2 (0.4) 0.0 (0.0)
Male	9-13	579	14.7	(0.3)	11.2 (0.8)	11.9 (0.7)	13.2 (0.5)	14.6 (0.4)	16.2 (0.5)	17.7 (0.8)	18.7 (1.0)	10-30	F	99.1 (1.2) 0.0 (0.0)
	14-18	634	15.4	(0.3)	11.7 (0.7)	12.4 (0.6)	13.6 (0.5)	15.1 (0.4)	17.0 (0.6)	18.7 (0.8)	19.8 (1.1)	10-30	<3	99.4 (0.7) <3
	19-30	578	16.4	(0.5)	10.8 (0.7)	11.8 (0.7)	13.7 (0.5)	15.9 (0.5)	18.3 (0.7)	21.0 (1.2)	23.0 (1.5)	10-35	F	97.5 (1.5) <3
	31-50	693	16.7	(0.5)	11.4 (1.0)	12.3 (0.9)	13.9 (0.7)	16.0 (0.6)	18.5 (0.7)	21.1 (1.2)	22.9 (1.6)	10-35	F	98.7 (1.0) <3
	51-70	596	17.5	(0.4)	12.9 (0.8)	13.8 (0.7)	15.3 (0.5)	17.1 (0.5)	19.1 (0.6)	21.1 (0.9)	22.3 (1.1)	10-35	<3	99.8 (0.4) <3
	>70	296	17.6	(0.7)	12.9 (1.0)	13.7 (0.9)	15.3 (0.8)	17.2 (0.7)	19.4 (1.0)	21.7 (1.3)	23.1 (1.6)	10-35	<3	99.9 (0.2) 0.0 (0.0)
	19+	2163	16.9	(0.3)	11.8 (0.4)	12.8 (0.3)	14.4 (0.3)	16.5 (0.3)	18.7 (0.4)	21.0 (0.6)	22.6 (0.7)	10-35	<3	99.2 (0.4) 0.0 (0.0)
Female	9-13	533	13.9	(0.3)	10.0 (0.5)	10.7 (0.5)	12.0 (0.4)	13.6 (0.4)	15.3 (0.5)	16.9 (0.7)	18.0 (0.8)	10-30	F	95.1 (2.4) 0.0 (0.0)
	14-18	638	14.4	(0.4)	10.7 (0.8)	11.4 (0.7)	12.6 (0.5)	14.0 (0.5)	15.5 (0.6)	17.0 (0.8)	18.0 (1.0)	10-30	F	97.9 (1.9) 0.0 (0.0)
	19-30	499	15.3	(0.5)	10.6 (0.9)	11.4 (0.8)	12.9 (0.7)	14.8 (0.6)	17.0 (0.6)	19.4 (0.9)	21.1 (1.1)	10-35	F	97.3 (2.1) <3
	31-50	716	16.9	(0.4)	12.0 (0.9)	13.0 (0.8)	14.6 (0.7)	16.6 (0.5)	18.6 (0.6)	20.6 (0.8)	22.0 (1.1)	10-35	<3	99.4 (0.8) 0.0 (0.0)
	51-70	745	16.9	(0.3)	12.4 (1.0)	13.1 (1.0)	14.3 (0.9)	15.8 (0.9)	17.4 (0.9)	18.9 (0.8)	20.0 (0.9)	10-35	<3	100.0 (0.8) 0.0 (0.0)
	>70	510	18.3	(0.6)	13.2 (0.7)	14.2 (0.7)	15.9 (0.6)	18.2 (0.7)	20.7 (0.8)	23.4 (1.0)	25.1 (1.2)	10-35	<3	99.8 (0.2) <3
	19+	2470	16.7	(0.2)	11.9 (0.4)	12.8 (0.4)	14.4 (0.3)	16.4 (0.3)	18.6 (0.3)	20.8 (0.4)	22.3 (0.6)	10-35	<3	99.4 (0.4) 0.0 (0.0)

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> 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 4.12 Percentage of total energy intake from carbohydrates, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

Sex	Age (years)	Percentiles ( <i>and SE</i> ) of usual intake										AMDR <sup>2</sup>	% below AMDR	(SE)	% within AMDR	(SE)	% above AMDR	(SE)
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)							
Both																		
	1-3	622	54.9	(0.8)	46.9 (1.9)	48.7 (1.6)	51.7 (1.2)	55.0 (1.0)	58.3 (1.1)	61.1 (1.4)	62.7 (1.6)	45-65	F		96.4 (2.6)		F	
	4-8	919	55.5	(0.5)	49.3 (1.6)	50.6 (1.3)	52.8 (0.8)	55.2 (0.5)	57.7 (0.9)	60.0 (1.4)	61.3 (1.7)	45-65	<3		99.3 (1.1)		<3	
Male																		
	9-13	579	54.5	(0.7)	45.8 (1.4)	47.7 (1.2)	51.0 (0.9)	54.5 (0.9)	57.9 (1.0)	60.8 (1.2)	62.5 (1.4)	45-65	F		94.9 (2.8)		F	
	14-18	634	52.4	(0.6)	45.0 (1.7)	46.7 (1.4)	49.5 (0.9)	52.5 (0.8)	55.4 (1.0)	58.1 (1.4)	59.7 (1.7)	45-65	F		94.8 (3.6)		<3	
	19-30	578	49.0	(0.8)	38.6 (2.0)	41.0 (1.7)	45.0 (1.2)	49.2 (1.0)	53.3 (1.1)	57.0 (1.4)	59.2 (1.7)	45-65	25.1 (6.4) <sup>E</sup>		74.3 (6.5)		<3	
	31-50	693	47.6	(1.1)	36.3 (2.7)	38.9 (2.2)	43.3 (1.5)	48.1 (1.2)	52.9 (1.7)	57.1 (2.4)	59.5 (2.8)	45-65	33.4 (8.1) <sup>E</sup>		66.0 (8.2)		<3	
	51-70	596	47.9	(1.2)	36.9 (2.3)	39.1 (1.9)	42.9 (1.4)	47.1 (1.2)	51.5 (1.7)	55.7 (2.5)	58.5 (3.1)	45-65	36.7 (8.6) <sup>E</sup>		62.4 (8.6)		<3	
	>70	296	49.3	(1.3)	38.9 (2.6)	41.4 (2.2)	45.3 (1.5)	49.9 (1.3)	54.6 (2.0)	58.7 (2.9)	61.3 (3.5)	45-65	23.5 (7.5) <sup>E</sup>		75.0 (8.0)		F	
	19+	2163	48.1	(0.6)	36.1 (1.1)	38.8 (0.9)	43.3 (0.7)	48.2 (0.7)	53.2 (0.8)	57.8 (1.1)	60.6 (1.3)	45-65	33.1 (3.5)		65.5 (3.5)		<3	
Female																		
	9-13	533	56.7	(0.6)	51.5 (1.7)	52.8 (1.4)	54.9 (0.9)	57.2 (0.7)	59.5 (0.9)	61.5 (1.4)	62.8 (1.7)	45-65	<3		98.9 (1.6)		F	
	14-18	638	54.2	(0.7)	46.7 (1.7)	48.5 (1.4)	51.4 (1.0)	54.6 (0.8)	57.6 (1.1)	60.4 (1.5)	62.1 (1.8)	45-65	F		96.6 (2.6)		F	
	19-30	499	52.1	(1.1)	44.8 (2.5)	46.4 (2.0)	49.0 (1.5)	52.0 (1.3)	55.0 (1.7)	57.7 (2.4)	59.4 (2.8)	45-65	F		94.3 (6.4)		<3	
	31-50	716	47.2	(0.7)	37.5 (1.1)	39.7 (1.0)	43.1 (1.0)	46.9 (0.9)	51.0 (1.0)	54.8 (1.0)	57.1 (1.1)	45-65	36.7 (6.1)		63.0 (5.9)		<3	
	51-70	745	48.8	(0.7)	40.6 (2.5)	42.4 (2.0)	45.4 (1.3)	48.8 (0.9)	52.2 (1.3)	55.2 (2.1)	57.1 (2.6)	45-65	F		77.7 (8.7)		<3	
	>70	510	51.5	(0.8)	40.6 (1.8)	43.0 (1.5)	47.1 (1.2)	51.4 (1.0)	55.7 (1.1)	59.5 (1.3)	61.8 (1.5)	45-65	16.1 (4.9) <sup>E</sup>		82.3 (5.1)		F	
	19+	2470	49.2	(0.4)	39.5 (0.9)	41.7 (0.8)	45.2 (0.6)	49.0 (0.5)	53.0 (0.6)	56.6 (0.8)	58.8 (1.0)	45-65	24.0 (3.2)		75.5 (3.3)		<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> 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 5.12 Percentage of total energy intake from saturated fats, by DRI age–sex group, household population, Prairie Region, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles ( <i>and SE</i> ) of usual intake						
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both											
	1-3	622	11.9	(0.4)	6.9 (0.7)	7.8 (0.6)	9.7 (0.5)	11.9 (0.4)	14.4 (0.5)	16.5 (0.6)	17.9 (0.8)
	4-8	919	11.0	(0.2)	8.6 (0.5)	9.1 (0.4)	10.0 (0.3)	11.0 (0.2)	12.1 (0.3)	13.1 (0.5)	13.8 (0.6)
Male											
	9-13	579	10.5	(0.2)	7.9 (0.4)	8.4 (0.4)	9.3 (0.3)	10.4 (0.3)	11.6 (0.3)	12.7 (0.5)	13.4 (0.6)
	14-18	634	10.9	(0.3)	8.4 (0.8)	8.8 (0.7)	9.6 (0.5)	10.6 (0.4)	11.7 (0.6)	12.8 (0.8)	13.5 (1.0)
	19-30	578	10.0	(0.3)	6.7 (0.6)	7.4 (0.5)	8.5 (0.4)	9.8 (0.3)	11.3 (0.4)	12.8 (0.6)	13.7 (0.8)
	31-50	693	10.2	(0.3)	7.2 (0.7)	7.8 (0.6)	8.8 (0.4)	9.9 (0.3)	11.1 (0.5)	12.3 (0.7)	12.9 (0.9)
	51-70	596	9.9	(0.3)	5.7 (0.8)	6.6 (0.7)	8.1 (0.5)	9.9 (0.4)	11.8 (0.4)	13.5 (0.6)	14.5 (0.7)
	>70	296	10.0	(0.4)	6.4 (0.6)	7.0 (0.6)	8.2 (0.5)	9.6 (0.5)	11.2 (0.5)	12.7 (0.7)	13.6 (0.8)
	19+	2163	10.0	(0.2)	6.4 (0.3)	7.1 (0.3)	8.4 (0.2)	9.9 (0.2)	11.5 (0.2)	13.0 (0.3)	13.9 (0.3)
Female											
	9-13	533	10.4	(0.2)	8.3 (0.6)	8.7 (0.5)	9.5 (0.4)	10.3 (0.3)	11.1 (0.4)	12.0 (0.6)	12.5 (0.7)
	14-18	638	10.1	(0.3)	7.2 (0.4)	7.8 (0.4)	8.8 (0.3)	10.0 (0.3)	11.3 (0.4)	12.6 (0.6)	13.5 (0.7)
	19-30	499	10.5	(0.5)	7.8 (0.5)	8.4 (0.5)	9.4 (0.5)	10.5 (0.6)	11.8 (0.6)	13.0 (0.6)	13.7 (0.7)
	31-50	716	10.7	(0.3)	8.8 (0.8)	9.2 (0.7)	9.9 (0.5)	10.7 (0.4)	11.5 (0.5)	12.2 (0.7)	12.7 (0.8)
	51-70	745	10.6	(0.3)	7.4 (0.7)	8.1 (0.6)	9.2 (0.4)	10.5 (0.3)	11.9 (0.4)	13.3 (0.7)	14.2 (0.8)
	>70	510	9.4	(0.3)	5.5 (0.4)	6.2 (0.4)	7.5 (0.3)	9.1 (0.3)	11.0 (0.4)	12.7 (0.5)	13.9 (0.6)
	19+	2470	10.5	(0.2)	7.3 (0.4)	7.9 (0.3)	9.1 (0.3)	10.4 (0.2)	11.8 (0.3)	13.2 (0.4)	14.1 (0.4)

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> No DRIs have been established for percentage of total energy intake from saturated fats.

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



**Table 6.12 Percentage of total energy intake from monounsaturated fats, by DRI age–sex group, household population, Prairie Region, 2004<sup>1,2</sup>**

Sex	Age (years)	n	Mean	(SE)	Percentiles ( <i>and SE</i> ) of usual intake						
					5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Both											
	1-3	622	10.2	(0.3)	6.0 (0.8)	6.9 (0.6)	8.4 (0.4)	10.1 (0.3)	12.0 (0.4)	13.6 (0.5)	14.7 (0.7)
	4-8	919	11.6	(0.2)	9.0 (0.8)	9.6 (0.6)	10.5 (0.4)	11.6 (0.3)	12.8 (0.4)	13.8 (0.6)	14.5 (0.8)
Male											
	9-13	579	12.1	(0.3)	9.0 (0.5)	9.6 (0.4)	10.7 (0.3)	12.0 (0.3)	13.4 (0.4)	14.7 (0.5)	15.5 (0.6)
	14-18	634	12.4	(0.3)	10.0 (0.7)	10.5 (0.6)	11.3 (0.4)	12.4 (0.3)	13.4 (0.4)	14.4 (0.6)	15.0 (0.7)
	19-30	578	12.9	(0.3)	9.0 (0.9)	9.8 (0.7)	11.3 (0.5)	13.0 (0.4)	14.7 (0.6)	16.3 (0.8)	17.3 (1.0)
	31-50	693	13.1	(0.5)	8.8 (0.3)	9.6 (0.3)	11.1 (0.3)	12.8 (0.2)	14.6 (0.3)	16.2 (0.4)	17.1 (0.4)
	51-70	596	12.8	(0.4)	11.5 (1.8)	11.8 (1.5)	12.4 (0.9)	12.9 (0.5)	13.5 (1.0)	14.1 (1.8)	14.5 (2.2)
	>70	296	12.5	(0.5)	7.8 (0.9)	8.7 (0.8)	10.2 (0.7)	12.1 (0.6)	14.1 (0.7)	15.9 (0.9)	17.1 (1.0)
	19+	2163	12.9	(0.2)	8.7 (0.5)	9.6 (0.4)	11.1 (0.3)	12.9 (0.3)	14.8 (0.3)	16.7 (0.5)	17.7 (0.5)
Female											
	9-13	533	11.1	(0.3)	9.1 (0.7)	9.5 (0.6)	10.3 (0.4)	11.1 (0.3)	11.9 (0.4)	12.7 (0.6)	13.2 (0.8)
	14-18	638	11.9	(0.3)	8.9 (0.6)	9.5 (0.5)	10.5 (0.4)	11.7 (0.3)	13.0 (0.5)	14.1 (0.7)	14.8 (0.8)
	19-30	499	12.1	(0.3)	9.1 (1.0)	9.7 (0.8)	10.8 (0.6)	12.1 (0.5)	13.4 (0.5)	14.5 (0.8)	15.3 (0.9)
	31-50	716	13.1	(0.3)	12.1 (1.2)	12.3 (1.0)	12.7 (0.7)	13.1 (0.4)	13.5 (0.5)	13.9 (0.8)	14.2 (1.1)
	51-70	745	12.9	(0.3)	9.4 (0.8)	10.1 (0.7)	11.4 (0.4)	12.9 (0.3)	14.5 (0.5)	16.0 (0.8)	16.8 (1.0)
	>70	510	11.3	(0.2)	7.9 (0.6)	8.6 (0.5)	9.7 (0.4)	11.1 (0.3)	12.6 (0.4)	13.9 (0.5)	14.7 (0.6)
	19+	2470	12.6	(0.2)	9.4 (0.4)	10.1 (0.3)	11.3 (0.3)	12.6 (0.2)	14.0 (0.3)	15.2 (0.4)	16.0 (0.4)

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> No DRIs have been established for the percentage of total energy intake from monounsaturated fats.

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



**Table 7.12 Percentage of total energy intake from polyunsaturated fats, by DRI age–sex group, household population, Prairie Region, 2004<sup>1,2</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake									
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)
Sex	Age (years)										
Both											
	1-3	622	3.7	(0.1)	2.0 (0.3)	2.3 (0.2)	2.9 (0.2)	3.6 (0.2)	4.4 (0.2)	5.1 (0.3)	5.7 (0.4)
	4-8	919	4.7	(0.1)	3.0 (0.2)	3.3 (0.2)	3.9 (0.1)	4.6 (0.1)	5.4 (0.2)	6.2 (0.3)	6.8 (0.3)
Male											
	9-13	579	5.2	(0.2)	3.4 (0.2)	3.7 (0.2)	4.3 (0.2)	5.0 (0.2)	5.9 (0.3)	6.9 (0.4)	7.6 (0.5)
	14-18	634	5.3	(0.2)	4.2 (0.2)	4.4 (0.2)	4.8 (0.2)	5.3 (0.2)	5.8 (0.2)	6.3 (0.2)	6.6 (0.3)
	19-30	578	5.3	(0.2)	4.1 (0.5)	4.4 (0.4)	4.8 (0.3)	5.4 (0.2)	6.0 (0.3)	6.6 (0.4)	7.0 (0.6)
	31-50	693	5.7	(0.3)	4.4 (0.6)	4.7 (0.5)	5.2 (0.4)	5.8 (0.3)	6.5 (0.4)	7.1 (0.6)	7.5 (0.7)
	51-70	596	5.7	(0.2)	4.0 (0.2)	4.3 (0.2)	4.9 (0.2)	5.7 (0.2)	6.5 (0.2)	7.3 (0.2)	7.8 (0.3)
	>70	296	6.1	(0.3)	3.7 (0.3)	4.1 (0.3)	4.9 (0.3)	5.9 (0.3)	7.1 (0.4)	8.4 (0.7)	9.4 (0.9)
	19+	2163	5.6	(0.1)	4.1 (0.3)	4.4 (0.3)	5.0 (0.2)	5.7 (0.2)	6.5 (0.2)	7.3 (0.3)	7.8 (0.4)
Female											
	9-13	533	4.8	(0.2)	3.8 (0.4)	4.0 (0.3)	4.4 (0.3)	4.8 (0.2)	5.3 (0.2)	5.8 (0.3)	6.1 (0.4)
	14-18	638	5.3	(0.2)	4.7 (0.5)	4.8 (0.5)	5.1 (0.3)	5.3 (0.2)	5.6 (0.3)	5.9 (0.5)	6.0 (0.7)
	19-30	499	5.2	(0.2)	4.4 (0.5)	4.6 (0.4)	4.9 (0.3)	5.3 (0.2)	5.6 (0.3)	6.0 (0.5)	6.2 (0.6)
	31-50	716	5.7	(0.2)	4.3 (0.5)	4.5 (0.4)	5.0 (0.3)	5.6 (0.2)	6.2 (0.2)	6.8 (0.4)	7.2 (0.5)
	51-70	745	5.8	(0.2)	3.8 (0.3)	4.1 (0.3)	4.8 (0.2)	5.7 (0.2)	6.6 (0.3)	7.6 (0.4)	8.2 (0.6)
	>70	510	5.4	(0.3)	3.7 (0.4)	4.0 (0.4)	4.6 (0.3)	5.4 (0.3)	6.1 (0.4)	7.0 (0.6)	7.6 (0.7)
	19+	2470	5.6	(0.1)	3.9 (0.2)	4.2 (0.2)	4.8 (0.1)	5.5 (0.1)	6.3 (0.1)	7.1 (0.2)	7.6 (0.3)

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> No DRIs have been established for the percentage of total energy intake from polyunsaturated fats.

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

**Table 8.12 Total dietary fibre (g/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake									AI <sup>2</sup>	% >AI	(SE)
		n	Mean (SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)			
<b>Sex</b>	<b>Age (years)</b>												
<b>Both</b>	<b>1-3</b>	<b>622</b>	<b>9.3</b> (0.4)	<b>4.1</b> (0.5)	<b>5.1</b> (0.4)	<b>6.9</b> (0.4)	<b>9.2</b> (0.4)	<b>11.8</b> (0.5)	<b>14.5</b> (0.8)	<b>16.4</b> (1.0)	<b>19</b>	<b>F</b>	
	<b>4-8</b>	<b>919</b>	<b>12.5</b> (0.3)	<b>7.7</b> (0.7)	<b>8.6</b> (0.6)	<b>10.1</b> (0.5)	<b>12.1</b> (0.4)	<b>14.4</b> (0.5)	<b>16.7</b> (0.8)	<b>18.2</b> (1.0)	<b>25</b>	<b>&lt;3</b>	
<b>Male</b>	<b>9-13</b>	<b>579</b>	<b>16.9</b> (0.7)	<b>10.8</b> (1.2)	<b>11.8</b> (1.1)	<b>13.9</b> (0.9)	<b>16.6</b> (0.9)	<b>19.9</b> (1.2)	<b>23.4</b> (1.9)	<b>25.8</b> (2.5)	<b>31</b>	<b>F</b>	
	<b>14-18</b>	<b>634</b>	<b>18.3</b> (0.7)	<b>10.2</b> (0.9)	<b>11.7</b> (0.8)	<b>14.4</b> (0.7)	<b>17.9</b> (0.8)	<b>22.1</b> (1.1)	<b>26.1</b> (1.5)	<b>28.6</b> (1.8)	<b>38</b>	<b>&lt;3</b>	
	<b>19-30</b>	<b>578</b>	<b>18.5</b> (0.8)	<b>11.0</b> (1.8) <sup>E</sup>	<b>12.5</b> (1.6)	<b>15.1</b> (1.3)	<b>18.3</b> (0.9)	<b>22.0</b> (1.2)	<b>25.9</b> (2.1)	<b>28.5</b> (2.8)	<b>38</b>	<b>&lt;3</b>	
	<b>31-50</b>	<b>693</b>	<b>18.9</b> (0.8)	<b>9.8</b> (1.2)	<b>11.4</b> (1.2)	<b>14.7</b> (1.0)	<b>18.8</b> (0.9)	<b>23.4</b> (1.1)	<b>28.7</b> (1.8)	<b>32.6</b> (2.5)	<b>38</b>	<b>F</b>	
	<b>51-70</b>	<b>596</b>	<b>18.4</b> (0.6)	<b>9.3</b> (0.7)	<b>11.0</b> (0.7)	<b>13.9</b> (0.6)	<b>17.5</b> (0.7)	<b>22.0</b> (1.0)	<b>27.2</b> (1.6)	<b>31.1</b> (2.2)	<b>30</b>	<b>F</b>	
	<b>&gt;70</b>	<b>296</b>	<b>18.9</b> (0.8)	<b>9.3</b> (1.4)	<b>11.1</b> (1.2)	<b>14.5</b> (1.0)	<b>18.2</b> (0.8)	<b>22.5</b> (1.0)	<b>27.7</b> (1.5)	<b>31.7</b> (2.2)	<b>30</b>	<b>F</b>	
	<b>19+</b>	<b>2163</b>	<b>18.7</b> (0.4)	<b>9.5</b> (0.6)	<b>11.2</b> (0.6)	<b>14.3</b> (0.5)	<b>18.3</b> (0.5)	<b>22.8</b> (0.6)	<b>28.0</b> (0.9)	<b>31.7</b> (1.2)			
<b>Female</b>	<b>9-13</b>	<b>533</b>	<b>14.8</b> (0.7)	<b>8.8</b> (0.8)	<b>9.9</b> (0.8)	<b>12.0</b> (0.8)	<b>14.7</b> (0.9)	<b>17.7</b> (1.0)	<b>20.9</b> (1.3)	<b>23.0</b> (1.6)	<b>26</b>	<b>F</b>	
	<b>14-18</b>	<b>638</b>	<b>13.1</b> (0.5)	<b>6.9</b> (0.6)	<b>8.0</b> (0.6)	<b>9.9</b> (0.6)	<b>12.5</b> (0.6)	<b>15.7</b> (0.7)	<b>19.1</b> (0.9)	<b>21.4</b> (1.2)	<b>26</b>	<b>&lt;3</b>	
	<b>19-30</b>	<b>499</b>	<b>13.7</b> (0.8)	<b>6.7</b> (0.8)	<b>7.8</b> (0.7)	<b>9.8</b> (0.7)	<b>12.6</b> (0.8)	<b>16.1</b> (1.0)	<b>20.2</b> (1.6)	<b>23.2</b> (2.2)	<b>25</b>	<b>F</b>	
	<b>31-50</b>	<b>716</b>	<b>13.8</b> (0.5)	<b>7.5</b> (0.9)	<b>8.5</b> (0.8)	<b>10.4</b> (0.8)	<b>13.0</b> (0.8)	<b>16.4</b> (0.8)	<b>20.3</b> (1.2)	<b>23.1</b> (1.7)	<b>25</b>	<b>F</b>	
	<b>51-70</b>	<b>745</b>	<b>16.0</b> (0.6)	<b>7.8</b> (0.6)	<b>9.1</b> (0.6)	<b>11.5</b> (0.6)	<b>14.8</b> (0.6)	<b>19.1</b> (0.9)	<b>23.7</b> (1.3)	<b>26.8</b> (1.8)	<b>21</b>	<b>17.6</b> (3.7) <sup>E</sup>	
	<b>&gt;70</b>	<b>510</b>	<b>15.0</b> (0.5)	<b>7.7</b> (0.5)	<b>8.9</b> (0.5)	<b>11.1</b> (0.6)	<b>14.4</b> (0.7)	<b>18.5</b> (0.8)	<b>23.3</b> (1.1)	<b>26.8</b> (1.4)	<b>21</b>	<b>15.5</b> (2.8) <sup>E</sup>	
	<b>19+</b>	<b>2470</b>	<b>14.5</b> (0.3)	<b>7.0</b> (0.3)	<b>8.2</b> (0.3)	<b>10.4</b> (0.3)	<b>13.5</b> (0.4)	<b>17.6</b> (0.5)	<b>22.2</b> (0.7)	<b>25.4</b> (0.9)			

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> 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 9.12 Total cholesterol (mg/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1,2</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake																
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)							
Sex	Age (years)																	
Both																		
	1-3	622	154	(8)	62	(8)	102	(7)	142	(8)	193	(13)	249	(21)	293	(29)		
	4-8	919	197	(9)	108	(5)	122	(6)	148	(8)	185	(10)	230	(14)	282	(19)	319	(23)
Male																		
	9-13	579	251	(14)	140	(24) <sup>E</sup>	158	(22)	193	(20)	240	(18)	299	(21)	364	(32)	409	(43)
	14-18	634	322	(14)	162	(23)	189	(21)	242	(19)	313	(19)	401	(24)	494	(36)	557	(46)
	19-30	578	338	(16)	170	(30) <sup>E</sup>	195	(27)	245	(23)	314	(20)	400	(27)	494	(44)	556	(58)
	31-50	693	315	(18)	161	(35) <sup>E</sup>	186	(32) <sup>E</sup>	236	(27)	302	(21)	385	(26)	476	(43)	537	(57)
	51-70	596	323	(18)	143	(35) <sup>E</sup>	174	(32) <sup>E</sup>	226	(28)	306	(23)	402	(32)	515	(57)	589	(79)
	>70	296	258	(18)	86	(18) <sup>E</sup>	111	(17)	159	(18)	226	(21)	319	(29)	430	(43)	506	(55)
	19+	2163	317	(10)	145	(13)	172	(12)	223	(12)	296	(12)	394	(15)	506	(23)	582	(30)
Female																		
	9-13	533	185	(8)	114	(8)	125	(8)	148	(9)	176	(11)	209	(12)	243	(15)	266	(16)
	14-18	638	211	(13)	112	(22) <sup>E</sup>	130	(20)	164	(16)	208	(14)	259	(19)	316	(32)	356	(43)
	19-30	499	226	(12)	137	(26) <sup>E</sup>	153	(24)	182	(20)	220	(17)	264	(19)	308	(27)	336	(35)
	31-50	716	268	(17)	138	(12)	159	(14)	200	(17)	256	(22)	325	(29)	400	(36)	451	(41)
	51-70	745	246	(11)	126	(20)	145	(18)	183	(15)	235	(14)	302	(19)	375	(32)	423	(41)
	>70	510	204	(10)	111	(16)	127	(15)	157	(13)	198	(12)	247	(17)	302	(25)	338	(32)
	19+	2470	245	(8)	135	(13)	154	(12)	189	(11)	237	(10)	295	(13)	357	(18)	399	(23)

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 cholesterol.

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

**Table 10.12 Vitamin A (RAE/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1,2</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake											
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)	EAR <sup>3</sup>	%<EAR (SE)
Sex	Age (years)												
Both													
	1-3	622	498	(25)	228 (30)	268 (28)	351 (27)	478 (29)	626 (39)	776 (57)	886 (76)	210	F
	4-8	919	567	(18)	305 (38)	350 (34)	432 (28)	536 (23)	657 (28)	784 (45)	869 (60)	275	F
Male													
	9-13	579	793	(68)	469 (85) <sup>E</sup>	523 (78)	623 (67)	756 (59)	917 (70)	1094 (106)	1217 (141)	445	F
	14-18	634	734	(35)	373 (63) <sup>E</sup>	439 (59)	565 (51)	730 (46)	926 (59)	1134 (92)	1278 (124)	630	34.6 (8.0) <sup>E</sup>
	19-30	578	710	(50)	322 (91) <sup>E</sup>	383 (86) <sup>E</sup>	506 (74)	675 (63)	882 (96)	1113 (151)	1278 (198)	625	42.7 (11.4) <sup>E</sup>
	31-50	693	641	(40)	244 (31)	302 (30)	415 (32)	578 (40)	802 (57)	1063 (89)	1255 (130)	625	56.3 (5.9)
	51-70	596	743	(74)	318 (66) <sup>E</sup>	376 (61)	486 (53)	616 (62)	865 (89)	1222 (192)	1528 (320) <sup>E</sup>	625	56.3 (5.9)
	>70	296	738	(61)	410 (76) <sup>E</sup>	457 (72)	551 (64)	680 (59)	848 (77)	1042 (130)	1184 (185)	625	39.5 (12.9) <sup>E</sup>
	19+	2163	692	(27)	285 (26)	347 (23)	451 (27)	638 (30)	882 (45)	1154 (73)	1371 (107)	625	48.2 (4.2)
Female													
	9-13	533	618	(58)	322 (62) <sup>E</sup>	369 (60)	458 (56)	578 (56)	728 (70)	897 (104)	1017 (136)	420	F
	14-18	638	524	(25)	186 (23)	231 (25)	328 (27)	461 (32)	650 (40)	884 (58)	1064 (78)	485	54.0 (5.3)
	19-30	499	546	(34)	200 (38) <sup>E</sup>	252 (37)	355 (36)	500 (38)	680 (52)	877 (76)	1011 (98)	500	50.0 (6.8)
	31-50	716	610	(35)	307 (63) <sup>E</sup>	357 (60) <sup>E</sup>	452 (55)	584 (52)	762 (59)	980 (96)	1139 (137)	500	34.2 (10.3) <sup>E</sup>
	51-70	745	638	(30)	316 (43)	363 (41)	457 (37)	593 (34)	773 (48)	983 (88)	1139 (130)	500	33.0 (7.2) <sup>E</sup>
	>70	510	565	(41)	255 (43) <sup>E</sup>	296 (44)	378 (47)	502 (54)	687 (68)	909 (104)	1072 (142)	500	49.6 (10.1) <sup>E</sup>
	19+	2470	598	(18)	263 (21)	316 (21)	418 (19)	545 (23)	739 (29)	974 (44)	1143 (60)	500	41.5 (4.0)

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 prevalences of intakes above the UL are shown for vitamin A. The UL for vitamin A applies to preformed vitamin A only, and those estimates had not yet been conducted at the time these tables were produced.

<sup>3</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 11.12 Vitamin C (mg/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

		Percentiles ( <i>and SE</i> ) of usual intake									<b>EAR</b> <sup>2</sup>		<b>%</b>	<b>UL</b> <sup>3</sup>		<b>%</b>		
		<b>n</b>	<b>Mean</b>	( <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> )	<b>&lt;EAR</b>	( <i>SE</i> )	<b>&lt;UL</b>	( <i>SE</i> )	<b>&gt;UL</b>	( <i>SE</i> )	
<b>Sex</b>	<b>Age (years)</b>																	
<b>Both</b>																		
	<b>1-3</b>	<b>622</b>	<b>121</b>	( <i>6</i> )	<b>30</b>	( <i>4</i> )	<b>40</b>	( <i>4</i> )	<b>63</b>	( <i>6</i> )	<b>100</b>	( <i>8</i> )	<b>151</b>	( <i>11</i> )	<b>215</b>	( <i>17</i> )	<b>264</b>	( <i>24</i> )
	<b>4-8</b>	<b>919</b>	<b>128</b>	( <i>5</i> )	<b>44</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>57</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>83</b>	( <i>8</i> )	<b>120</b>	( <i>7</i> )	<b>162</b>	( <i>9</i> )	<b>206</b>	( <i>16</i> )	<b>237</b>	( <i>22</i> )
<b>Male</b>																		
	<b>9-13</b>	<b>579</b>	<b>149</b>	( <i>10</i> )	<b>54</b>	( <i>15</i> ) <sup><i>E</i></sup>	<b>67</b>	( <i>15</i> ) <sup><i>E</i></sup>	<b>97</b>	( <i>13</i> )	<b>142</b>	( <i>12</i> )	<b>196</b>	( <i>16</i> )	<b>254</b>	( <i>27</i> )	<b>295</b>	( <i>36</i> )
	<b>14-18</b>	<b>634</b>	<b>149</b>	( <i>12</i> )	<b>74</b>	( <i>21</i> ) <sup><i>E</i></sup>	<b>87</b>	( <i>19</i> ) <sup><i>E</i></sup>	<b>111</b>	( <i>17</i> )	<b>145</b>	( <i>16</i> )	<b>187</b>	( <i>20</i> )	<b>233</b>	( <i>32</i> )	<b>265</b>	( <i>41</i> )
	<b>19-30</b>	<b>578</b>	<b>145</b>	( <i>12</i> )	<b>44</b>	( <i>14</i> ) <sup><i>E</i></sup>	<b>56</b>	( <i>14</i> ) <sup><i>E</i></sup>	<b>83</b>	( <i>14</i> ) <sup><i>E</i></sup>	<b>123</b>	( <i>13</i> )	<b>180</b>	( <i>18</i> )	<b>247</b>	( <i>30</i> )	<b>296</b>	( <i>42</i> )
	<b>31-50</b>	<b>693</b>	<b>132</b>	( <i>11</i> )	<b>35</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>47</b>	( <i>11</i> ) <sup><i>E</i></sup>	<b>73</b>	( <i>11</i> )	<b>118</b>	( <i>12</i> )	<b>184</b>	( <i>18</i> )	<b>266</b>	( <i>34</i> )	<b>330</b>	( <i>52</i> )
	<b>51-70</b>	<b>596</b>	<b>111</b>	( <i>11</i> )	<b>39</b>	( <i>11</i> ) <sup><i>E</i></sup>	<b>48</b>	( <i>11</i> ) <sup><i>E</i></sup>	<b>69</b>	( <i>11</i> )	<b>98</b>	( <i>11</i> )	<b>137</b>	( <i>13</i> )	<b>181</b>	( <i>19</i> )	<b>211</b>	( <i>25</i> )
	<b>&gt;70</b>	<b>296</b>	<b>106</b>	( <i>7</i> )	<b>32</b>	( <i>6</i> ) <sup><i>E</i></sup>	<b>41</b>	( <i>7</i> )	<b>62</b>	( <i>7</i> )	<b>94</b>	( <i>8</i> )	<b>138</b>	( <i>11</i> )	<b>192</b>	( <i>17</i> )	<b>232</b>	( <i>23</i> )
	<b>19+</b>	<b>2163</b>	<b>128</b>	( <i>6</i> )	<b>36</b>	( <i>5</i> )	<b>47</b>	( <i>5</i> )	<b>71</b>	( <i>6</i> )	<b>112</b>	( <i>7</i> )	<b>171</b>	( <i>10</i> )	<b>243</b>	( <i>19</i> )	<b>296</b>	( <i>30</i> )
<b>Female</b>																		
	<b>9-13</b>	<b>533</b>	<b>150</b>	( <i>11</i> )	<b>73</b>	( <i>21</i> ) <sup><i>E</i></sup>	<b>86</b>	( <i>20</i> ) <sup><i>E</i></sup>	<b>111</b>	( <i>18</i> )	<b>146</b>	( <i>15</i> )	<b>187</b>	( <i>17</i> )	<b>231</b>	( <i>25</i> )	<b>260</b>	( <i>32</i> )
	<b>14-18</b>	<b>638</b>	<b>132</b>	( <i>9</i> )	<b>51</b>	( <i>9</i> ) <sup><i>E</i></sup>	<b>63</b>	( <i>9</i> )	<b>88</b>	( <i>10</i> )	<b>125</b>	( <i>11</i> )	<b>171</b>	( <i>13</i> )	<b>221</b>	( <i>17</i> )	<b>256</b>	( <i>21</i> )
	<b>19-30</b>	<b>499</b>	<b>119</b>	( <i>8</i> )	<b>43</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>54</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>77</b>	( <i>10</i> )	<b>111</b>	( <i>10</i> )	<b>155</b>	( <i>14</i> )	<b>203</b>	( <i>22</i> )	<b>236</b>	( <i>28</i> )
	<b>31-50</b>	<b>716</b>	<b>104</b>	( <i>6</i> )	<b>36</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>45</b>	( <i>10</i> ) <sup><i>E</i></sup>	<b>66</b>	( <i>9</i> )	<b>97</b>	( <i>8</i> )	<b>136</b>	( <i>10</i> )	<b>182</b>	( <i>16</i> )	<b>215</b>	( <i>23</i> )
	<b>51-70</b>	<b>745</b>	<b>118</b>	( <i>7</i> )	<b>49</b>	( <i>9</i> ) <sup><i>E</i></sup>	<b>59</b>	( <i>9</i> )	<b>79</b>	( <i>8</i> )	<b>108</b>	( <i>8</i> )	<b>145</b>	( <i>10</i> )	<b>187</b>	( <i>15</i> )	<b>216</b>	( <i>20</i> )
	<b>&gt;70</b>	<b>510</b>	<b>96</b>	( <i>6</i> )	<b>29</b>	( <i>5</i> ) <sup><i>E</i></sup>	<b>38</b>	( <i>5</i> )	<b>59</b>	( <i>6</i> )	<b>87</b>	( <i>8</i> )	<b>124</b>	( <i>11</i> )	<b>168</b>	( <i>15</i> )	<b>200</b>	( <i>20</i> )
	<b>19+</b>	<b>2470</b>	<b>110</b>	( <i>4</i> )	<b>37</b>	( <i>3</i> )	<b>47</b>	( <i>4</i> )	<b>69</b>	( <i>4</i> )	<b>100</b>	( <i>5</i> )	<b>142</b>	( <i>6</i> )	<b>191</b>	( <i>9</i> )	<b>225</b>	( <i>11</i> )

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. The EAR for vitamin C used in this table is that for non-smokers.

<sup>3</sup> UL is the Tolerable Upper Intake Level. For additional detail, see footnote 11 in Appendix A.

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

**Table 12.12 Calcium (mg/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

					Percentiles (and SE) of usual intake										
		n	Mean	(SE)	5th (SE)	10th (SE)	25th (SE)	50th (SE)	75th (SE)	90th (SE)	95th (SE)	AI <sup>2</sup>	% >AI (SE)	UL <sup>3</sup>	% >UL (SE)
Sex	Age (years)														
Both															
	1-3	622	1028	(33)	526 (40)	619 (40)	794 (40)	1012 (42)	1267 (54)	1550 (82)	1748 (102)	500	96.0 (1.5)	2500	<3
	4-8	919	991	(28)	606 (65)	679 (54)	809 (38)	967 (31)	1142 (51)	1320 (85)	1440 (112)	800	76.2 (6.0)	2500	<3
Male															
	9-13	579	1218	(58)	651 (56)	746 (53)	929 (51)	1176 (60)	1485 (89)	1834 (167)	2082 (232)	1300	38.6 (6.0)	2500	<sup>F</sup>
	14-18	634	1330	(47)	668 (73)	787 (69)	1009 (65)	1307 (67)	1678 (81)	2051 (111)	2284 (140)	1300	50.6 (5.7)	2500	<sup>F</sup>
	19-30	578	1075	(51)	437 (59)	524 (59)	709 (54)	979 (50)	1311 (67)	1680 (114)	1945 (159)	1000	48.1 (4.8)	2500	<3
	31-50	693	888	(48)	416 (49)	491 (49)	645 (45)	839 (45)	1088 (58)	1395 (97)	1620 (138)	1000	32.2 (4.9)	2500	<3
	51-70	596	802	(39)	315 (50)	389 (50)	542 (50)	764 (50)	1050 (58)	1358 (82)	1562 (104)	1200	16.4 (3.4) <sup>E</sup>	2500	<3
	>70	296	793	(35)	388 (38)	454 (38)	588 (38)	768 (40)	981 (56)	1248 (90)	1458 (127)	1200	11.8 (3.5) <sup>E</sup>	2500	<3
	19+	2163	904	(26)	376 (23)	455 (24)	615 (26)	845 (27)	1137 (33)	1488 (51)	1744 (73)			2500	<3
Female															
	9-13	533	965	(36)	543 (49)	620 (47)	762 (45)	944 (49)	1160 (63)	1395 (86)	1558 (108)	1300	14.7 (4.4) <sup>E</sup>	2500	<3
	14-18	638	871	(32)	402 (30)	477 (32)	623 (34)	820 (39)	1068 (52)	1346 (72)	1539 (89)	1300	11.7 (2.8) <sup>E</sup>	2500	<3
	19-30	499	926	(70)	496 (95) <sup>E</sup>	566 (92)	704 (85)	889 (79)	1107 (92)	1334 (131)	1486 (168)	1000	36.1 (10.1) <sup>E</sup>	2500	<3
	31-50	716	804	(43)	364 (64) <sup>E</sup>	432 (64)	565 (61)	739 (56)	961 (59)	1228 (80)	1423 (105)	1000	21.9 (5.0) <sup>E</sup>	2500	<3
	51-70	745	763	(31)	421 (48)	478 (44)	586 (38)	728 (35)	899 (47)	1087 (76)	1219 (102)	1200	<sup>F</sup>	2500	<3
	>70	510	683	(38)	322 (29)	379 (32)	501 (38)	671 (48)	881 (65)	1132 (91)	1306 (106)	1200	<sup>F</sup>	2500	<3
	19+	2470	804	(23)	373 (24)	438 (24)	569 (26)	748 (28)	980 (33)	1254 (45)	1448 (56)			2500	<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> AI is the Adequate Intake. For additional detail, see footnote 10 in Appendix A.

<sup>3</sup> UL is the Tolerable Upper Intake Level. For additional detail, see footnote 11 in Appendix A.

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

**Table 13.12 Sodium (mg/d): Usual intakes from food, by DRI age–sex group, household population, Prairie Region, 2004<sup>1</sup>**

		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> )	AI <sup>2</sup>	% >AI	( <i>SE</i> )	UL <sup>3</sup>	% >UL	( <i>SE</i> )							
Sex	Age (years)																							
Both																								
	1-3	622	1838	(79)	869	(95)	1055	(89)	1378	(84)	1804	(89)	2259	(110)	2801	(162)	3193	(209)	1000	91.7	(2.8)	1500	68.0	(5.1)
	4-8	919	2608	(69)	1924	(209)	2048	(178)	2272	(123)	2546	(81)	2850	(130)	3150	(226)	3341	(295)	1200	100.0	(0.1)	1900	95.7	(4.5)
Male																								
	9-13	579	3559	(140)	2281	(175)	2509	(164)	2936	(155)	3506	(161)	4209	(205)	4995	(310)	5564	(417)	1500	100.0	(0.2)	2200	96.3	(2.1)
	14-18	634	4251	(130)	2589	(205)	2903	(193)	3488	(176)	4231	(176)	5082	(212)	5946	(286)	6510	(352)	1500	100.0	(0.2)	2300	97.8	(1.5)
	19-30	578	3919	(129)	2724	(358)	2958	(308)	3374	(226)	3876	(165)	4429	(210)	4977	(345)	5331	(453)	1500	100.0	(0.1)	2300	99.1	(1.7)
	31-50	693	3578	(157)	2166	(298)	2446	(271)	2968	(221)	3623	(183)	4342	(220)	5027	(313)	5454	(386)	1500	99.6	(0.6)	2300	92.9	(4.1)
	51-70	596	3378	(113)	1945	(185)	2228	(168)	2736	(149)	3382	(149)	4158	(184)	4998	(263)	5573	(337)	1300	99.4	(0.4)	2300	88.3	(3.7)
	>70	296	3094	(165)	1973	(242)	2192	(224)	2599	(199)	3115	(196)	3703	(239)	4300	(318)	4690	(385)	1200	100.0	(0.3)	2300	86.7	(6.4)
	19+	2163	3569	(78)	2107	(135)	2386	(126)	2908	(111)	3582	(96)	4359	(111)	5144	(155)	5656	(198)				2300	91.8	(2.4)
Female																								
	9-13	533	2985	(109)	2068	(188)	2241	(174)	2549	(156)	2949	(150)	3426	(173)	3922	(233)	4248	(286)	1500	99.8	(0.5)	2200	91.4	(5.5)
	14-18	638	2881	(113)	1609	(135)	1831	(135)	2262	(132)	2827	(139)	3466	(172)	4116	(237)	4563	(300)	1500	96.7	(1.5)	2300	73.4	(5.6)
	19-30	499	2932	(142)	1550	(224)	1797	(212)	2251	(194)	2839	(181)	3549	(197)	4300	(261)	4803	(326)	1500	95.7	(2.6)	2300	73.0	(7.9)
	31-50	716	2626	(83)	1783	(222)	1939	(197)	2220	(151)	2574	(109)	2986	(128)	3422	(221)	3722	(304)	1500	99.1	(1.7)	2300	69.6	(10.3)
	51-70	745	2496	(69)	1806	(183)	1940	(159)	2180	(119)	2475	(91)	2805	(123)	3139	(202)	3361	(266)	1300	100.0	(0.4)	2300	65.2	(10.1)
	>70	510	2145	(69)	1236	(107)	1386	(107)	1687	(97)	2081	(83)	2512	(89)	2941	(123)	3231	(154)	1200	95.9	(1.8)	2300	36.3	(5.2)
	19+	2470	2598	(50)	1568	(79)	1754	(74)	2098	(66)	2536	(63)	3046	(76)	3587	(111)	3960	(144)				2300	63.7	(3.7)

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

<sup>3</sup> UL is the Tolerable Upper Intake Level. For additional detail, see footnote 11 in Appendix A.

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 III 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 Armed 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. See section II.4: Measuring Sampling Variability with Bootstrap Replication for more details.
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. Data on trans fat intake cannot be obtained from the CCHS 2.2 dataset and therefore are not reported separately. However, the estimates for percent energy from total fat comprise all fats, including trans fats. Note that the estimates provided for energy intake from the individual types of fat will not add up to the estimates provided for total fat due to measurement error as well as the lack of data on trans fat intake.
14. 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: Interpretation of Sodium Results

Three questions in the CCHS 2.2 questionnaire pertained to salt intake. These were asked to obtain information on type of salt used, frequency of added table salt and the use of table salt in cooking.

### 1. Salt Type

—Indicator of the type of salt normally used:

1 = Ordinary Salt

2 = Sea, Seasoned. Or other Flavoured Salt

3 = Lite Salt

4 = Salt Substitute

5 = None

X = Don't Know; XX = Refusal; XXX = Other Specified

### 2. Frequency of Salt at the Table

—Indicator of how often salt is added at the table:

1 = Rarely

2 = Occasionally

3 = Very Often

X = Don't Know; XX = Refusal; XXX = Other Specified

### 3. Frequency of Salt in Cooking

—Indicator of how often *ordinary* salt is added during cooking/preparation:

1 = Rarely

2 = Occasionally

3 = Very Often

4 = Never

X = Don't Know; XX = Refusal; XXX = Other Specified

These questions were the same as those asked in the United States (US) surveys utilizing the Automated Multiple-Pass Method. This method was chosen for a number of reasons. Asking about the use of salt for each cooked, non-processed food was time consuming and repetitive, and respondents frequently did not know the answer for specific foods. Overall salt consumption questions were asked to reduce respondent burden and to address this identified uncertainty. Also, it was estimated that salt added during cooking or food preparation contributed 5% or less to average sodium intake.

Use of the information collected from these questions differed between Canada and the US. Answers to the salt questions in the CCHS 2.2 were not reflected in the estimated sodium intakes in the coded data. Salt present in standard recipes for mixed dishes, such as spaghetti sauce or stew, remained constant. For other cooked items, such as cooked vegetables, the default choice was the food without salt added during cooking. In the US, answers to the question about frequency of salt added in cooking are used to adjust estimated sodium intakes for selected foods that are likely to have been prepared at home.

## 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 for Calcium, Phosphorus, Magnesium, Vitamin D and Fluoride*. Washington, DC: National Academy Press, 1997. Available at: <http://books.nap.edu/catalog/5776.html>

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 Vitamin C, Vitamin E, Selenium and Carotenoids*. Washington, DC: National Academy Press, 2000. Available at: <http://books.nap.edu/catalog/9810.html>

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)

## Appendix D: Note on Changes to Volume 1

In January 2008, users were informed that Volume 1 would be reissued because of corrections made to the sodium table point estimates. Since then, some modifications have been made to the compendium to correct methodological discrepancies in some of the tables. **It is important to note that in all cases described below, modifications are not related to the data quality of the CCHS Cycle 2.2 files.** Only methodological modifications used in calculating the tables were made. [Attached is the list of domains affected.](#) A complete list of modifications is available in a separate document upon request.

### Modifications to Volume 1

#### 1. Standard Error

The calculation of the **standard error** of the percentage of the population above or below a certain threshold had to be modified. This affects 12 standard error estimates in Volume 1:

- 5 for calcium
- 4 for percentage of total energy intake from fats
- 3 for percentage of total energy intake from carbohydrates.

In addition, the same type of modification had to be made to the sodium tables, affecting the standard error of the percentage of the population above the UL for 146 domains out of 221.

## 2. Within-Individual Variance

Other modifications are related to the use of **within-individual variances**<sup>5</sup> in some domains. For the sodium tables, there were some domains where it was necessary to force another domain's within-individual variance. However, in a number of cases, the next higher domain was not used. These point estimates were corrected using the appropriate within-individual variance.

## 3. Methodology

Changes were also made to the methodology used to calculate the bootstrap estimate. In order to calculate the bootstrap estimate, the point estimate is recalculated using every replicate weight, meaning 500 times. There are two options; the first uses the same day-to-day variation estimate for every replicate. The second (if the data are coming from another CCHS domain) uses each replicate's day-to-day variation estimate. This means that for replicate one you use the regional day-to-day variation of the first replicate, for replicate two, the second and so on.

In theory, the second method is optimal as variability in the center of the distribution and in the tails are both taken into account. With the first option we do not take into account variability in the tails. The second method will always be more conservative than the first as it accounts for more sources of variability. That being said, the first method is still statistically valid.

In Volume 1, it was initially decided to use the second method. However, most nutrients, with the exception of cholesterol and Vitamin C, were

---

<sup>5</sup> To estimate the distribution of usual intake (percentiles, percent above or below a certain threshold), we need to estimate two variance components: the within-individual variance (day-to-day variation in one individual's intake) and the between-individual variance (variation in long-term average population consumption). This involves a complex normality transformation and an ANOVA model using the first and second 24-hour recall. The second 24-hour recall is used to estimate the day-to-day variation. These calculations are done using SIDE. It is possible that for various reasons (usually not enough second recalls), we fail to estimate the day-to-day variation. In that case, instead of having no estimate, it is possible to use another estimate in its place. For example, for small provinces, if we are unable to estimate the day to day variation, we could use the regional or national day-to-day variation in its place.

calculated using the first method. For consistency and for timeliness, it was decided to recalculate the estimates which used the second method. These modifications will affect 30 domains for the cholesterol tables and 16 domains for the Vitamin C tables. Modifications will affect the standard errors of the 5<sup>th</sup>, 10<sup>th</sup>, 25<sup>th</sup>, 75<sup>th</sup>, 90<sup>th</sup> and 95<sup>th</sup> percentiles. Standard errors for the 5<sup>th</sup>, 10<sup>th</sup>, 90<sup>th</sup> and 95<sup>th</sup> percentiles will be between 10% and 20% lower than the previously published standard errors that were calculated using the second method described above. For the 25<sup>th</sup> and 75<sup>th</sup> percentiles the difference will be less than 10%. Again, this revision only affects the calculation of the SE and not the point estimates already published.

The methodology section in Volume 1 has also been modified to reflect the methods that were actually used to produce the tables.

#### **4. Appendices**

Finally, a note was added to [Appendix A: Table Footnotes](#) to clarify that an estimate of 0.0 with a standard error of 0.0 refers to an estimate with a standard error smaller than 0.1%.

### **List of Domains Affected**

#### **Percentage of total energy intake from fats**

Table 2.1 – Males 51-70

Table 2.2 – Males 19-30

Table 2.3 – Males 19+, Females 51-70

Table 2.10 – Males 19-30

#### **Percentage of total energy intake from carbohydrates**

Table 4.1 – Males 14-18, Males 31-50

Table 4.9 – Females 19+

#### **Percentage of total energy intake from monounsaturated fats**

Table 6.1 – Females 14-18

Table 6.2 – Males >70

Table 6.3 – Children 4-8, Males 51-70, Males >70

Table 6.5 – Females >70

Table 6.6 – Males 9-13, Females 9-13

Table 6.7 – Females 19-30  
Table 6.8 – Females 19-30  
Table 6.9 – Males 31-50  
Table 6.10 – Females 19-30

**Fibre (mg/d)**

Table 8.6 – Females 19-30  
Table 8.11 – Females 19-30

**Note:** AI corrected from 21 to 25 for Females 19-30 in Tables 8.1 to 8.12

**Cholesterol (mg/d)**

Table 9.1 – Males 19-30, Males 51-70, Females 14-18, Females 19-30  
Table 9.3 – Males 19-30, Males 51-70, Females 9-13, Females >70  
Table 9.4 – Children 4-8, Females 31-50, Females >70  
Table 9.6 – Males 9-13, Males 31-50  
Table 9.7 – Males 19-30, Females 9-13, Females 19-30, Females >70  
Table 9.8 – Females 9-13  
Table 9.9 – Children 4-8, Males 9-13, Males 14-18, Males 19-30, Males 31-50,  
Males 51-70, Females 9-13, Females 19-30, Females 31-50  
Table 9.12 – Children 4-8, Females 9-13, Females 31-50

**Vitamin A (RAE/d)**

Table 10.5 – Males 31-50  
Table 10.9 – Females 19+  
Table 10.12 – Males 9-13, Males 14-18, Males 19-30, Females 9-13, Females 31-50

**Vitamin C (mg/d)**

Table 11.1 – Females 19-30  
Table 11.2 – Children 4-8, Females 14-18  
Table 11.3 – Males 9-13, Males 14-18, Females 19-30  
Table 11.4 – Males 51-70  
Table 11.6 – Females 9-13  
Table 11.7 – Children 4-8, Males 9-13, Males 19-30, Females 9-13, Females 51-70  
Table 11.8 – Males 14-18, Females 31-50  
Table 11.9 – Females 9-13

**Calcium (mg/d)**

Table 12.3 – Males 9-13  
Table 12.4 – Males 31-50  
Table 12.6 – Females 19-30  
Table 12.7 – Males 31-50, Females 19-30

**Sodium (mg/d)**

Table 13.1 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 71+, Males 19+, Females 9-13, Females 14-18, Females 31-50, Females 19+

Table 13.2 – Children 1-3, Males 9-13, Males 14-18, Males 19-30, Males 31-50, Males

51-70, Males 71+, Males 19+, Females 9-13, Females 14-18, Females 19-30,

Females 31-50, Females 51-70, Females 71+, Females 19+

Table 13.3 – Children 4-8, Males 9-13, Males 14-18, Males 19-30, Males 31-50,

Males 51-70, Males 71+, Males 19+, Females 9-13, Females 14-18, Females 19-30,

Females 31-50, Females 51-70, Females 19+

Table 13.4 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 31-50, Males 51-70, Males 71+, Males 19+, Females 9-13, Females 19-30,

Females 31-50, Females 19+

Table 13.5 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30, Males

31-50, Males 71+, Males 19+, Females 14-18, Females 31-50, Females 51-70,

Females 19+

Table 13.6 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 31-50,

Males 19+, Females 14-18, Females 19-30, Females 19+

Table 13.7 – Children 4-8, Males 14-18, Males 19-30, Males 31-50, Males 51-70,

Males 71+, Males 19+, Females 9-13, Females 14-18, Females 31-50, Females

51-70, Females 19+

Table 13.8 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 31-50, Males 51-70, Males 71+, Males 19+, Females 9-13, Females 14-18,

Females 31-50, Females 51-70, Females 71+, Females 19+

Table 13.9 - Males 9-13, Males 14-18, Males 19-30, Males 71+, Males 19+, Females

14-18, Females 19-30, Females 31-50, Females 19+

Table 13.10 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 31-50, Males 51-70, Males 71+, Males 19+, Females 31-50, Females 51-70,

Females 19+

Table 13.11 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 31-50, Males 51-70, Males 71+, Males 19+, Females 9-13, Females 14-18,

Females 19+

Table 13.12 – Children 1-3, Children 4-8, Males 9-13, Males 14-18, Males 19-30,

Males 31-50, Males 71+, Males 19+, Females 9-13, Females 31-50, Females 51-70,

Females 19+