

Table S1 The mean bias, mean relative bias and MSE of estimates obtained with each scenario.

Dietary components	Parameter	True Value	Mean Bias (Mean Relative Bias %)				MSE			
			C2	NC2	C3	NC3	C2	NC2	C3	NC3
Energy(kcal)	Mean	1591.74	0.19(0.01)	0.56(0.03)	0.23(0.01)	0.70(0.04)	2548.70	2303.38	2530.30	2253.84
	P5	981.83	-145.27(14.80)	-146.29(14.90)	-117.41(11.96)	-113.96(11.61)	22085.48	22173.01	15012.37	13765.79
	P10	1091.76	-137.60(12.60)	-128.79(11.80)	-109.11(9.99)	-103.07(9.44)	19834.24	17134.44	12577.09	11240.45
	P25	1286.44	-92.05(7.16)	-86.15(6.70)	-76.87(5.98)	-65.31(5.08)	9598.23	8496.23	7023.83	5639.67
	P50	1543.51	-25.92(2.77)	-20.59(2.79)	-18.35(3.05)	-14.65(2.70)	2831.76	2761.74	2957.89	2416.41
	P75	1858.45	46.62(3.84)	49.09(3.88)	33.68(3.99)	33.98(3.52)	7588.07	7518.43	7232.85	5923.83
	P90	2147.91	187.06(8.71)	173.00(8.05)	153.73(7.20)	137.99(6.48)	47445.66	38989.42	34995.62	26421.90
	P95	2388.49	239.31(10.02)	221.78(9.29)	185.75(7.78)	163.86(6.87)	69300.09	60093.31	45953.04	36221.36
Fat(g)	Mean	37.54	0.10(0.26)	-0.03(-0.09)	0.16(0.42)	-0.07(-0.19)	0.70	0.59	0.53	0.40
	P5	13.72	-3.29(23.97)	-3.45(25.14)	-2.14(15.57)	-2.17(15.83)	11.44	12.27	5.11	5.06
	P10	18.51	-4.91(26.54)	-4.90(26.48)	-3.62(19.57)	-3.77(20.38)	24.79	24.37	13.54	14.58
	P25	25.21	-4.41(17.49)	-4.53(17.99)	-3.02(11.99)	-3.25(12.90)	20.16	21.00	9.91	11.03
	P50	35.72	-3.2(8.95)	-3.35(9.37)	-2.46(6.88)	-2.61(7.30)	11.25	11.82	7.09	7.27
	P75	47.41	1.68(3.95)	1.58(3.58)	1.50(3.46)	1.34(3.19)	5.41	4.33	4.39	3.12
	P90	59.45	9.01(15.15)	9.05(15.23)	6.75(11.35)	6.62(11.13)	86.92	88.72	48.87	48.05
	P95	67.16	15.74(23.43)	14.94(22.25)	12.58(18.73)	10.43(15.53)	259.24	234.01	169.23	115.35
Protein(g)	Mean	66.47	-0.01(-0.01)	0.02(0.03)	-0.04(-0.06)	0.03(0.05)	3.34	2.97	3.16	2.77
	P5	38.46	-6.48(16.84)	-6.31(16.40)	-5.29(13.75)	-4.93(12.82)	43.03	40.86	29.42	25.33
	P10	43.48	-6.42(14.76)	-6.04(13.88)	-5.36(12.33)	-4.64(10.67)	42.73	37.34	29.73	22.72
	P25	51.70	-3.98(7.69)	-3.84(7.42)	-3.11(6.01)	-2.72(5.27)	17.24	15.82	10.54	8.30
	P50	63.66	-1.78(3.18)	-1.48(2.78)	-1.53(2.75)	-0.93(2.34)	5.56	4.33	4.28	3.01
	P75	79.31	1.24(2.68)	1.06(2.68)	0.98(2.56)	0.69(2.14)	7.15	6.49	6.44	4.58
	P90	91.21	10.33(11.32)	9.48(10.39)	8.46(9.28)	7.71(8.45)	124.67	107.60	87.89	75.06
	P95	103.04	13.92(13.51)	11.79(11.44)	10.69(10.38)	9.26(8.99)	237.60	175.03	147.45	113.17
CHO(g)	Mean	247.87	-0.17(-0.07)	0.19(0.08)	-0.26(-0.10)	0.31(0.12)	97.51	90.99	96.08	89.11
	P5	136.92	-22.35(16.33)	-22.63(16.53)	-18.77(13.71)	-18.13(13.24)	514.20	524.70	363.85	345.42
	P10	150.43	-17.98(11.95)	-16.57(11.02)	-12.89(8.57)	-12.93(8.60)	331.97	285.81	174.98	178.11
	P25	182.75	-12.77(6.99)	-11.97(6.55)	-10.97(6)	-8.74(4.85)	203.7	177.34	158.66	111.74
	P50	226.53	-0.39(3.98)	0.39(3.88)	-0.68(3.87)	0.75(4.11)	92.54	97.25	85.09	100.30
	P75	297.98	7.29(4.77)	8.61(4.86)	6.11(4.84)	7.05(4.40)	261.60	274.90	254.93	229.70
	P90	377.20	15.08(5.07)	15.14(4.69)	11.67(4.77)	10.26(4.1)	595.71	534.69	475.94	405.80
	P95	428.02	27.14(6.50)	24.46(6.20)	21.50(5.79)	16.79(5.32)	1438.60	1199.31	1139.48	808.03
Dietary Fiber(g)	Mean	10.42	0.01(0.07)	0(0.02)	0(0.01)	0(-0.02)	0.16	0.16	0.14	0.15
	P5	5.46	-1.73(31.63)	-1.70(31.11)	-1.39(25.42)	-1.37(25.01)	3.03	2.91	1.95	1.89
	P10	6.04	-1.49(24.71)	-1.42(23.42)	-1.19(19.71)	-1.11(18.4)	2.26	2.03	1.43	1.26
	P25	7.81	-1.39(17.82)	-1.36(17.43)	-1.11(14.18)	-1.06(13.54)	1.99	1.9	1.27	1.17
	P50	9.79	-0.57(6.08)	-0.55(5.83)	-0.43(5.07)	-0.40(4.5)	0.47	0.47	0.33	0.32
	P75	12.38	0.53(5.31)	0.56(5.45)	0.46(5.16)	0.49(5.36)	0.68	0.69	0.54	0.60
	P90	15.52	1.99(12.84)	1.97(12.70)	1.66(10.66)	1.45(9.35)	4.75	4.61	3.55	2.90
	P95	17.50	3.52(20.10)	3.36(19.17)	2.63(15.03)	2.55(14.57)	13.72	12.62	7.82	7.34
Cholesterol(mg)	Mean	370.29	0.80(0.22)	-0.45(-0.12)	1.28(0.35)	-0.72(-0.19)	192.65	232.95	151.17	228.50
	P5	102.38	-92.05(89.91)	-91.17(89.06)	-73.27(71.57)	-70.68(69.04)	8533.76	8353.78	5498.00	5100.34
	P10	149.13	-94.46(63.34)	-92.85(62.26)	-54.56(36.58)	-50.06(33.57)	9152.71	8811.25	3313.17	2678.14
	P25	254.40	-67.6(26.57)	-65.51(25.75)	-48.63(19.12)	-49.89(19.61)	4822.29	4504.73	2740.99	2891.46
	P50	353.17	-8.74(3.95)	-10.39(4.13)	-6.40(3.38)	-8.07(3.81)	334.40	358.69	232.61	324.21
	P75	473.24	35.74(7.67)	31.76(6.90)	27.50(5.89)	23.47(5.47)	1608.28	1326.65	1025.86	872.72
	P90	593.55	106.65(17.97)	100.01(16.85)	81.43(13.72)	69.36(11.69)	12057.88	10794.09	6972.83	5549.41
	P95	672.92	164.16(24.39)	159.7(23.73)	121.84(18.11)	113.63(16.89)	28138.34	27029.16	15729.61	13690.12
Calcium(mg)	Mean	427.04	0.34(0.08)	-0.10(-0.02)	0.50(0.12)	-0.23(-0.05)	45.75	39.59	38.00	29.36
	P5	218.74	-66.73(30.51)	-63.21(28.9)	-53.53(24.47)	-49.26(22.52)	4500.62	4070.07	2938.8	2510.05
	P10	249.64	-61.60(24.68)	-59.78(23.95)	-49.32(19.76)	-46.59(18.66)	3878.33	3646.45	2514.09	2252.17
	P25	309.89	-45.42(14.66)	-44.14(14.24)	-34.70(11.20)	-33.59(10.84)	2127.21	2009.32	1234.90	1176.94
	P50	406.26	-23.39(5.76)	-23.47(5.78)	-18.60(4.58)	-18.45(4.54)	646.62	620.23	407.31	380.45
	P75	515.45	19.55(3.79)	16.86(3.41)	16.70(3.30)	15.12(3.18)	465.04	410.34	376.32	342.73
	P90	631.10	84.5(13.39)	82.97(13.15)	66.74(10.58)	61.71(9.78)	7735.87	7471.48	5222.41	4205.99
	P95	720.27	135.74(18.85)	130.36(18.10)	113.66(15.78)	101.3(14.06)	20266.30	18634.97	14876.69	11559.24

Tabе SI. Cont.										
Dietary components	Parameter	True Value	Bias (Relative Bias %)				MSE			
			C2	NC2	C3	NC3	C2	NC2	C3	NC3
Iron (mg)	Mean	19.62	-0.01(-0.04)	0.01(0.05)	-0.02(-0.08)	0.02(0.09)	1.49	1.36	1.43	1.31
	P5	12.00	-2.75(22.96)	-2.72(22.64)	-2.39(19.89)	-2.23(18.55)	7.64	7.46	5.75	5.03
	P10	13.20	-2.57(19.48)	-2.44(18.46)	-2.21(16.73)	-1.97(14.93)	6.71	6.06	4.96	3.99
	P25	15.58	-2.01(12.93)	-1.9(12.19)	-1.63(10.44)	-1.51(9.68)	4.31	3.85	2.85	2.54
	P50	18.81	-1.12(6.11)	-1.05(6.01)	-0.80(4.92)	-0.71(5.11)	1.86	1.85	1.30	1.32
	P75	22.91	0.32(5.63)	0.34(5.44)	0.35(6.14)	0.39(5.34)	2.41	2.39	3.11	2.39
	P90	27.30	3.34(12.53)	3.18(11.98)	2.84(11.07)	2.58(10.95)	20.20	16.99	15.29	13.43
	P95	29.48	7.16(24.29)	6.99(23.71)	5.55(18.94)	5.04(17.14)	67.81	65.22	42.77	36.17
Zinc (mg)	Mean	9.90	-0.01(-0.07)	0(0.04)	-0.01(-0.14)	0.01(0.07)	0.12	0.11	0.11	0.10
	P5	5.63	-1.08(19.13)	-1.03(18.30)	-0.91(16.19)	-0.85(15.08)	1.18	1.09	0.87	0.76
	P10	6.17	-0.87(14.11)	-0.8(12.89)	-0.72(11.63)	-0.58(9.33)	0.79	0.67	0.54	0.39
	P25	7.53	-0.63(8.42)	-0.58(7.71)	-0.50(6.66)	-0.42(5.63)	0.44	0.40	0.29	0.24
	P50	9.31	-0.19(3.36)	-0.19(2.87)	-0.12(3.15)	-0.09(2.62)	0.13	0.11	0.13	0.09
	P75	11.82	0.04(2.98)	0.08(3.06)	0.02(2.93)	0.03(2.82)	0.17	0.19	0.17	0.17
	P90	14.06	1.16(8.28)	1.07(7.61)	0.98(6.99)	0.87(6.21)	1.86	1.54	1.36	1.08
	P95	16.06	1.75(10.89)	1.52(9.48)	1.28(8.1)	1.13(7.09)	3.90	3.03	2.40	1.87
Magnesium (mg)	Mean	279.06	-0.06(-0.02)	0.13(0.05)	-0.17(-0.06)	0.14(0.05)	81.16	75.95	79.44	74.88
	P5	172.49	-32.3(18.73)	-31.85(18.46)	-26.34(15.27)	-25.14(14.58)	1067.43	1040.58	723.69	655.52
	P10	189.59	-27.63(14.57)	-26.15(13.79)	-22.19(11.71)	-20.97(11.06)	786.96	706.20	508.28	469.28
	P25	225.24	-21.89(9.72)	-20.91(9.28)	-17.80(7.9)	-16.51(7.33)	507.35	467.72	339.53	304.49
	P50	270.03	-8.13(3.23)	-7.36(2.96)	-5.8(2.59)	-4.42(2.3)	142.45	120.17	99.61	76.21
	P75	324.03	11.46(4.83)	10.48(4.51)	9.46(4.94)	9.00(4.30)	290.68	260.38	283.12	226.18
	P90	376.32	41.09(10.92)	41.81(11.11)	34.96(9.29)	31.82(8.57)	2085.69	2061.35	1589.29	1345.59
	P95	409.26	65.99(16.12)	62.99(15.39)	53.99(13.19)	48.94(11.96)	4824.27	4513.57	3460.27	2858.36
Sodium (mg)	Mean	901.42	1.34(0.15)	-0.12(-0.01)	2.06(0.23)	-0.48(-0.05)	631.87	597.59	336.23	327.51
	P5	301.27	-112.25(37.26)	-109.76(36.43)	-89.05(29.56)	-87.53(29.05)	12958.65	12402.90	8413.25	8066.79
	P10	371.51	-116.79(31.44)	-115.78(31.16)	-91.79(24.71)	-91.56(24.65)	13919.95	13714.87	8585.24	8590.26
	P25	537.73	-132.34(24.61)	-133.69(24.86)	-103.26(19.20)	-103.18(19.19)	17719.29	18067.40	10834.99	10861.11
	P50	808.07	-115.44(14.29)	-115.17(14.25)	-77.14(9.55)	-77.51(9.59)	13744.83	13671.79	6247.53	6231.88
	P75	1190.64	-15.84(2.55)	-22.2(2.96)	-20.92(2.59)	-20.76(2.57)	1452.01	2013.14	1407.19	1520.81
	P90	1531.49	289.40(18.90)	286.13(18.68)	223.89(14.62)	222.14(14.51)	90381.98	89051.91	54808.45	54519.73
	P95	1784.09	535.93(30.04)	523.17(29.32)	415.60(23.29)	393.43(22.05)	304828.20	292408.40	185574.70	167047.70
Potassium (mg)	Mean	1656.70	0.07(0)	0.10(0.01)	-0.10(-0.01)	0.30(0.02)	3258.73	3144.80	3203.10	3052.69
	P5	998.88	-193.84(19.41)	-185.65(18.59)	-159.5(15.97)	-148.94(14.91)	38311.02	35067.40	26364.52	22718.79
	P10	1119.60	-178.89(15.98)	-167.52(14.96)	-150.79(13.47)	-136.89(12.23)	32792.73	28622.93	23064.33	19050.10
	P25	1333.47	-134.78(10.11)	-123.59(9.27)	-112.54(8.44)	-95.51(7.16)	19330.11	16450.42	13670.92	10301.32
	P50	1597.43	-38.32(3.07)	-35.89(3.04)	-37.21(3.15)	-24.14(3.09)	3880.79	3759.59	4127.07	3251.57
	P75	1930.12	68.66(4.24)	62.14(3.76)	66.83(4.24)	50.16(3.66)	10468.08	8405.42	9444.06	7320.60
	P90	2269.66	228.69(10.08)	215.80(9.51)	195.50(8.61)	176.49(7.78)	66645.00	58896.07	51795.01	44803.84
	P95	2557.98	291.99(11.42)	272.25(10.66)	218.98(8.56)	216.54(8.61)	111862.40	102786.20	72060.84	75703.08
Phosphorus (mg)	Mean	976.50	-0.48(-0.05)	0.39(0.04)	-0.80(-0.08)	0.79(0.08)	782.79	722.82	769.02	700.48
	P5	610.11	-102.06(16.73)	-101.87(16.70)	-86.48(14.18)	-82.38(13.5)	10775.16	10546.43	7791.37	6937.30
	P10	674.41	-93.89(13.92)	-88.17(13.07)	-77.19(11.45)	-67.51(10.01)	9062.07	7957.88	6282.96	4827.38
	P25	788.41	-58.47(7.42)	-53.2(6.75)	-49.13(6.23)	-38.49(4.88)	3772.87	3213.81	2812.55	1798.56
	P50	952.28	-25.55(2.95)	-18.76(2.58)	-20.35(2.67)	-14.10(2.44)	1066.90	899.55	952.05	746.62
	P75	1139.44	26.44(3.29)	25.16(3.05)	18.22(2.98)	17.68(2.96)	1940.12	1805.31	1515.16	1704.29
	P90	1313.30	115.21(8.77)	102.68(7.85)	92.65(7.18)	81.78(6.28)	16790.63	14209.80	12594.32	9936.27
	P95	1418.67	194.67(13.72)	173.51(12.23)	161.16(11.36)	143.57(10.12)	44571.04	34753.17	29948.51	24606.41
Vitamin A (µgRAE)	Mean	415.13	0.35(0.09)	-0.5(-0.12)	0.49(0.12)	-0.78(-0.19)	1369.94	1428.52	1219.94	1355.04
	P5	194.64	-101.19(51.99)	-100.47(51.62)	-83.34(42.82)	-81.39(41.82)	10310.13	10156.09	7034.74	6713.83
	P10	224.68	-96.03(42.74)	-94.41(42.02)	-76.61(34.1)	-76.29(33.96)	9299.17	9016.13	5964.67	5906.18
	P25	288.28	-84.37(29.27)	-83.09(28.82)	-67.66(23.47)	-65.78(22.82)	7313.06	7089.38	4816.73	4615.03
	P50	377.66	-58.6(15.52)	-59.09(15.65)	-46.60(12.34)	-45.46(12.07)	3977.19	4119.48	2845.51	2849.18
	P75	502.10	-0.26(8.41)	-2.99(8.86)	4.71(8.59)	1.82(8.79)	2595.59	2781.51	2814.40	2857.93
	P90	650.15	129.24(20.82)	127.87(21.06)	108.33(18.02)	109.57(18.13)	28020.08	27645.74	19369.27	20473.38
	P95	762.83	300.28(39.36)	294.41(38.59)	251.77(33.00)	233.34(30.59)	106654.4	105198.5	75792.43	67715.72

Table S1. Cont.										
Dietary components	Parameter	True Value	Mean Bias (Mean Relative Bias %)				MSE			
			C2	NC2	C3	NC3	C2	NC2	C3	NC3
Vitamin C (mg)	Mean	65.68	-0.06(-0.09)	0.01(0.01)	-0.21(-0.31)	-0.03(-0.04)	15.88	16.13	14.30	15.65
	P5	28.59	-13.71(47.96)	-13.71(47.97)	-11.32(39.59)	-10.4(36.37)	191.38	191.45	130.65	110.08
	P10	35.41	-14.13(39.91)	-13.44(37.94)	-11.51(32.49)	-10.53(29.75)	205.34	184.91	135.68	115.61
	P25	45.32	-9.88(21.81)	-9.52(21.00)	-7.72(17.03)	-7.39(16.31)	105.04	99.41	66.08	65.57
	P50	61.68	-4.69(8.59)	-4.75(8.07)	-3.92(7.31)	-3.60(6.81)	38.72	36.95	29.25	27.16
	P75	80.23	4.98(6.95)	5.01(6.84)	3.85(5.77)	3.79(5.98)	50.78	50.25	36.61	35.68
	P90	101.46	16.76(16.52)	16.64(16.40)	13.85(13.65)	12.98(12.80)	367.07	351.90	263.58	232.32
	P95	120.30	24.08(20.02)	22.81(18.96)	17.59(14.62)	15.80(13.14)	680.31	619.95	377.94	334.97
Vitamin E (mg)	Mean	11.75	0.03(0.24)	0(-0.04)	0.03(0.29)	-0.01(-0.12)	0.39	0.32	0.39	0.31
	P5	6.47	-2.3(35.58)	-2.25(34.82)	-1.96(30.22)	-1.86(28.71)	5.34	5.12	3.85	3.49
	P10	7.36	-2.27(30.85)	-2.21(29.97)	-1.9(25.85)	-1.77(23.98)	5.20	4.92	3.65	3.17
	P25	9.03	-2.03(22.45)	-1.96(21.73)	-1.6(17.68)	-1.52(16.88)	4.23	3.96	2.71	2.46
	P50	11.3	-1.34(11.83)	-1.26(11.19)	-0.96(8.46)	-0.92(8.21)	2.09	1.91	1.24	1.16
	P75	13.9	0.66(5.99)	0.64(5.87)	0.74(6.66)	0.61(5.83)	1.11	1.06	1.29	0.95
	P90	16.84	3.79(22.52)	3.60(21.4)	3.05(18.09)	2.75(16.34)	16.18	14.72	11.00	8.84
	P95	18.5	7.14(38.61)	6.70(36.21)	5.17(27.97)	4.83(26.10)	54.46	47.87	29.13	25.15
Vitamin B1 (mg)	Mean	0.87	0(-0.09)	0(0.07)	0(-0.09)	0(0.15)	0	0	0	0
	P5	0.50	-0.13(26.27)	-0.13(26.02)	-0.10(19.7)	-0.10(20.34)	0.02	0.02	0.01	0.01
	P10	0.56	-0.12(21.41)	-0.12(21.80)	-0.10(17.40)	-0.10(17.41)	0.01	0.02	0.01	0.01
	P25	0.67	-0.08(12.27)	-0.07(11.2)	-0.06(9.15)	-0.05(8.11)	0.01	0.01	0	0
	P50	0.83	-0.03(4.37)	-0.03(4.06)	-0.02(3.93)	-0.02(3.26)	0	0	0	0
	P75	1.03	0.05(5.02)	0.05(5.37)	0.05(4.59)	0.04(4.36)	0	0	0	0
	P90	1.26	0.14(11.43)	0.15(11.59)	0.11(8.81)	0.11(8.61)	0.02	0.02	0.01	0.01
	P95	1.43	0.20(13.74)	0.18(12.84)	0.15(10.72)	0.14(9.65)	0.04	0.04	0.03	0.02
Vitamin B2 (mg)	Mean	0.81	0(0.02)	0(-0.01)	0(0.06)	0(-0.01)	0	0	0	0
	P5	0.48	-0.11(22.19)	-0.10(21.79)	-0.09(19.53)	-0.09(18.13)	0.01	0.01	0.01	0.01
	P10	0.52	-0.08(15.04)	-0.08(14.83)	-0.06(11.17)	-0.06(11.20)	0.01	0.01	0	0
	P25	0.65	-0.07(10.77)	-0.07(10.51)	-0.06(9.05)	-0.05(8.20)	0.01	0.01	0	0
	P50	0.79	-0.03(3.92)	-0.03(3.76)	-0.02(3.34)	-0.02(2.94)	0	0	0	0
	P75	0.94	0.03(3.79)	0.03(3.48)	0.03(3.17)	0.03(3.08)	0	0	0	0
	P90	1.09	0.13(11.88)	0.13(11.52)	0.12(10.72)	0.11(9.83)	0.02	0.02	0.02	0.01
	P95	1.23	0.18(15.09)	0.17(14.18)	0.15(12.59)	0.14(11.66)	0.04	0.03	0.03	0.02
Vitamin B3 (mg)	Mean	14.04	0(-0.02)	0(0.02)	0(-0.02)	0(0.01)	0.13	0.14	0.1	0.13
	P5	6.86	-1.61(23.52)	-1.49(21.74)	-1.33(19.35)	-1.15(16.83)	2.67	2.26	1.79	1.36
	P10	7.96	-1.55(19.42)	-1.45(18.2)	-1.27(15.99)	-1.13(14.23)	2.45	2.14	1.64	1.32
	P25	10.05	-1.07(10.68)	-1.07(10.66)	-0.89(8.86)	-0.91(9.09)	1.21	1.20	0.84	0.87
	P50	13.00	-0.38(2.96)	-0.35(2.96)	-0.30(2.45)	-0.19(2.16)	0.21	0.20	0.15	0.12
	P75	17.44	0.15(2.79)	0.12(2.88)	0.09(2.51)	0.07(2.89)	0.33	0.33	0.25	0.33
	P90	21.61	1.57(7.7)	1.48(7.03)	1.35(6.45)	1.15(5.56)	3.55	3.08	2.55	2.00
	P95	24.70	2.87(11.61)	2.74(11.15)	2.18(8.85)	2.22(8.99)	10.66	10.14	6.88	6.69
Vitamin B9 (µg)	Mean	144.52	0.24(0.16)	-0.17(-0.12)	0.34(0.24)	-0.30(-0.21)	25.28	27.81	26.53	28.69
	P5	74.92	-28.02(37.40)	-27.60(36.84)	-22.49(30.02)	-21.84(29.16)	793.71	770.79	512.10	484.03
	P10	86.45	-26.03(30.11)	-25.80(29.85)	-21.01(24.30)	-20.54(23.76)	685.68	671.68	447.49	427.45
	P25	108.35	-19.93(18.40)	-19.72(18.20)	-16.03(14.80)	-15.49(14.30)	413.57	402.03	271.64	256.84
	P50	135.34	-6.40(4.90)	-5.71(4.65)	-3.73(3.83)	-3.46(3.84)	67.49	63.70	49.83	45.15
	P75	173.99	9.19(5.62)	8.08(5.53)	6.65(4.79)	5.76(4.70)	134.31	121.28	87.87	84.44
	P90	213.38	33.68(15.78)	29.57(13.86)	26.09(12.23)	21.27(9.97)	1244.39	980.37	755.11	538.83
	P95	243.80	52.21(21.41)	48.91(20.06)	39.74(16.30)	36.37(14.92)	2921.68	2598.00	1794.97	1500.09
Wheat (g)	Mean	170.40	0.31(0.18)	-0.50(-0.29)	0.63(0.37)	53.12	51.35	46.00	45.14	-0.45(-0.27)
	P5	39.09	-38.34(98.08)	-22.33(57.12)	-23.23(59.42)	1414.38	1479.01	505.36	552.21	-37.48(95.88)
	P10	51.68	-26.27(50.83)	-18.8(36.39)	-19.09(36.94)	650.07	703.26	360.92	372.41	-25.31(48.98)
	P25	80.06	-13.28(16.59)	-10.08(12.59)	-8.23(10.28)	209.90	196.07	111.59	79.20	-13.92(17.39)
	P50	142.26	-0.94(3.60)	-2.59(3.63)	-0.78(3.44)	57.74	41.65	40.26	35.71	-3.97(4.56)
	P75	238.70	4.74(5.08)	-0.37(5.22)	1.99(5.22)	217.62	201.33	206.57	196.01	3.13(5.41)
	P90	340.11	21.43(7.17)	12.50(5.95)	15.07(6.23)	662.34	777.97	519.76	538.85	19.00(6.38)
	P95	379.39	57.19(15.08)	48.94(12.90)	46.78(12.33)	4049.47	3835.08	2814.60	2608.27	58.52(15.42)

Table S1. Cont.										
Dietary components	Parameter	True Value	Bias (Relative Bias %)				MSE			
			C2	NC2	C3	NC3	C2	NC2	C3	NC3
Pork (g)	Mean	48.62	0.16(0.33)	-0.09(-0.18)	0.38(0.78)	-0.10(-0.21)	4.84	4.48	3.66	3.36
	P5	1.86	-1.86(100.00)	-1.86(100.00)	-1.86(100.00)	-1.86(100.00)	3.45	3.45	3.45	3.45
	P10	6.46	-6.46(100.00)	-6.46(100.00)	-6.46(100.00)	-6.46(100.00)	41.74	41.74	41.74	41.74
	P25	20.71	-20.71(100.00)	-20.67(99.8)	-12.41(59.93)	-12.74(61.51)	429.08	427.46	158.87	165.9
	P50	41.11	-10.96(26.67)	-11.09(26.98)	-6.71(16.33)	-6.99(17.01)	135.01	138.29	51.00	54.71
	P75	70.96	2.83(6.03)	2.64(4.81)	1.57(4.03)	1.52(4.34)	22.18	16.57	11.97	13.73
	P90	99.40	26.72(26.88)	25.89(26.05)	21.20(21.33)	19.22(19.34)	748.40	710.94	490.97	397.44
	P95	118.48	47.29(39.92)	45.64(38.52)	32.07(27.07)	34.27(28.93)	2299.31	2179.34	1065.51	1244.73
Vegetables (g)	Mean	221.59	-0.17(-0.08)	0(0)	-0.07(-0.03)	0.13(0.06)	45.31	38.12	36.83	28.34
	P5	92.77	-44.38(47.84)	-42.73(46.07)	-33.69(36.32)	-32.67(35.22)	1990.09	1853.40	1160.65	1096.74
	P10	115.60	-42.02(36.35)	-41.91(36.25)	-33.77(29.21)	-32.45(28.07)	1785.84	1783.45	1165.28	1072.67
	P25	152.07	-31.18(20.50)	-29.18(19.19)	-25.29(16.63)	-22.54(14.82)	998.71	872.37	653.75	531.96
	P50	205.82	-11.89(5.78)	-9.93(5.08)	-8.79(4.96)	-6.71(3.66)	184.77	143.52	136.72	83.84
	P75	276.24	16.40(6.23)	15.40(5.60)	12.80(4.95)	12.34(4.47)	419.00	308.78	283.12	208.32
	P90	342.43	61.85(18.06)	58.61(17.12)	49.45(14.44)	44.5(13.00)	4146.79	3697.01	2717.41	2059.91
	P95	394.86	88.21(22.34)	87.18(22.08)	72.94(18.47)	67.12(17.00)	8194.88	8082.75	5882.91	4812.53
Milk (g)	Mean	77.94	0.09(0.11)	0.04(0.06)	0.25(0.32)	0.09(0.12)	71.63	73.59	64.36	69.34
	P5	0	0(-)	0(-)	0(-)	0(-)	0	0	0	0
	P10	0	0(-)	0(-)	0(-)	0(-)	0	0	0	0
	P25	15.72	-15.72(100.00)	-15.72(100.00)	-15.72(100.00)	-15.72(100.00)	247.19	247.19	247.19	247.19
	P50	60.71	-60.71(100.00)	-60.71(100.00)	-22.5(37.05)	-26.94(44.63)	3686.22	3686.22	1026.48	1191.42
	P75	115.48	3.97(8.93)	3.34(9.48)	7.09(20.06)	5.85(18.98)	111.56	126.05	572.60	528.16
	P90	177.12	61.49(34.72)	60.16(33.97)	53.32(30.10)	47.82(27.00)	4139.85	4012.85	3404.62	2941.05
	P95	223.21	29.04(13.01)	28.31(12.68)	30.79(13.79)	28.02(12.56)	868.04	815.04	1006.70	791.71
Beans (g)	Mean	50.15	0.06(0.12)	0.05(0.11)	0.15(0.30)	0.09(0.18)	19.58	20.09	16.13	19.05
	P5	9.93	-9.93(100.00)	-9.93(100.00)	-9.93(100.00)	-9.93(100.00)	98.61	98.61	98.61	98.61
	P10	14.49	-14.49(100.00)	-14.49(100.00)	-13.51(93.26)	-13.26(91.57)	209.85	209.85	183.92	177.54
	P25	26.86	-17.07(63.56)	-16.79(62.49)	-13.11(48.79)	-12.67(47.16)	295.61	284.85	176.88	163.09
	P50	46.64	-13.59(29.13)	-13.27(28.44)	-10.48(22.48)	-10.36(22.20)	192.07	181.77	119.22	113.72
	P75	67.04	-0.77(8.83)	-0.87(8.30)	1.00(8.60)	1.97(9.41)	44.31	38.51	38.31	48.86
	P90	92.11	32.08(34.82)	30.45(33.06)	26.07(28.30)	24.05(26.11)	1202.82	1118.56	808.87	719.22
	P95	104.32	67.56(64.76)	65.01(62.31)	48.01(46.02)	47.46(45.50)	4916.22	4568.12	2462.65	2564.99