

## **APPENDIX C**

### **Produce, Meat, Dairy and Egg Consumption Empirical Distributions Tables (gm/day).**

### **Comparison Tables of Produce, Meat, Dairy and Egg Empirical Consumption Distributions (gm/kg BW\*day) with Parametric Models.**

### **Probability and Cumulative Probability Distributions of Produce, Meat, Dairy, and Egg Empirical Distributions with Parametric Models (gm/kg BW\*day and g/day).**

*Table C1. Comparison of Age 0-70 Produce Consumption Empirical Distributions With Parametric Models (g/kg\*day)*

	<b>Exposed</b>		<b>Leafy</b>		<b>Protected</b>		<b>Root</b>	
	Empirical Dist.	Parametric Model	Empirical Dist.	Parametric Model	Empirical Dist.	Parametric Model	Empirical Dist.	Parametric Model
Mean	3.56	3.40	2.90	2.97	1.39	1.38	3.16	3.07
Std Dev.	5.12	5.66	3.50	4.95	1.75	2.23	3.81	5.26
P5	0.28	0.23	0.24	0.23	0.13	0.10	0.27	0.23
P10	0.44	0.36	0.35	0.35	0.17	0.15	0.41	0.35
P20	0.66	0.61	0.52	0.58	0.26	0.25	0.62	0.58
P30	0.93	0.89	0.82	0.84	0.42	0.37	0.89	0.84
P40	1.42	1.23	1.27	1.14	0.60	0.51	1.40	1.16
P50	2.00	1.67	1.79	1.53	0.86	0.69	1.88	1.55
P60	2.57	2.26	2.36	2.05	1.22	0.93	2.58	2.09
P70	3.53	3.13	3.12	2.79	1.51	1.28	3.51	2.87
P80	5.13	4.58	4.26	4.03	2.00	1.87	4.91	4.14
P90	7.93	7.77	6.68	6.68	3.01	3.14	7.29	6.92
P95	12.1	12.0	10.6	10.2	4.88	4.83	10.5	10.6

*Table C2. Comparison of Age 0-70 Meat Consumption Empirical Distributions with Parametric Models (g/kg\*day)*

	<b>Beef</b>		<b>Chicken</b>		<b>Pork</b>	
	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model
Mean	2.25	2.32	1.46	1.44	1.39	1.42
Std. Dev.	3.07	3.50	1.90	2.19	1.79	2.19
P05	0.23	0.22	0.12	0.12	0.12	0.12
P10	0.32	0.32	0.18	0.18	0.18	0.17
P20	0.46	0.52	0.27	0.30	0.27	0.29
P30	0.63	0.73	0.38	0.42	0.37	0.41
p40	0.91	0.98	0.59	0.57	0.53	0.56
p50	1.34	1.28	0.87	0.76	0.78	0.75
p60	1.85	1.69	1.19	1.02	1.14	0.99
p70	2.43	2.27	1.50	1.38	1.56	1.35
p80	3.50	3.20	2.32	1.97	2.07	1.94
p90	5.15	5.15	3.24	3.24	3.20	3.19
p95	6.97	7.62	5.02	4.88	4.59	4.82

*Table C3. Comparison of Age 0-70 Egg and Dairy Consumption Empirical Distributions with Parametric Models (g/kg\*day)*

	<b>Dairy</b>		<b>Egg</b>	
	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model
Mean	5.46	5.63	1.80	1.85
Std. Dev.	8.96	12.4	2.30	2.73
p5	0.43	0.35	0.19	0.19
p10	0.59	0.54	0.28	0.28
p20	0.95	0.93	0.38	0.44
p30	1.40	1.37	0.55	0.61
p40	2.12	1.92	0.81	0.81
p50	2.87	2.62	1.11	1.06
p60	3.95	3.57	1.55	1.39
p70	5.45	4.99	1.97	1.84
p80	7.58	7.36	2.59	2.57
p90	11.7	12.6	4.06	4.07
p95	17.4	19.7	5.39	5.94

*Table C4. Comparison of Age 0-9 Produce Consumption Empirical Distributions With Parametric Models (g/kg\*day)*

	<b>Exposed</b>		<b>Leafy</b>		<b>Protected</b>		<b>Root</b>	
	Empirical Dist	Parametric Model	Empirical Dist	Parametric Model	Empirical Dist	Parametric Model	Empirical Dist	Parametric Model
Mean	4.16	3.93	2.92	2.59	1.63	1.64	4.08	4.09
S. D.	5.58	5.65	3.69	3.42	2.16	2.17	4.66	6.28
P5	0.59	0.41	0.39	0.28	0.23	0.15	0.57	0.40
P10	0.73	0.60	0.52	0.41	0.30	0.18	0.68	0.59
P20	0.87	0.95	0.75	0.64	0.34	0.22	0.87	0.95
P30	1.19	1.33	0.93	0.89	0.40	0.28	1.11	1.33
P40	1.32	1.76	1.04	1.18	0.52	0.60	1.45	1.77
P50	1.71	2.29	1.29	1.53	0.60	0.85	1.84	2.32
P60	2.58	2.98	1.97	1.99	0.73	1.20	2.93	3.03
P70	4.31	3.95	2.59	2.63	1.16	1.70	5.38	4.04
P80	6.54	5.49	4.86	3.64	3.04	2.49	6.77	5.67
P90	10.0	8.67	8.16	5.72	4.66	4.05	11.3	9.06
P95	15.7	12.7	10.9	8.31	6.66	5.80	14.9	13.3

**Table C5. Comparison of Age 0-9 Meat Consumption Empirical Distributions with Parametric Models (g/kg\*day)**

	<b>Beef</b>		<b>Chicken</b>		<b>Pork</b>	
	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model
Mean	2.24	2.25	1.80	1.81	1.31	1.30
Std Dev	2.63	2.64	1.96	2.15	1.46	1.44
p05	0.37	0.28	0.30	0.26	0.23	0.20
p10	0.47	0.33	0.31	0.28	0.27	0.23
p20	0.53	0.48	0.40	0.37	0.33	0.32
p30	0.63	0.69	0.45	0.51	0.43	0.44
p40	0.86	0.96	0.57	0.71	0.55	0.59
p50	1.08	1.31	0.72	0.99	0.73	0.79
p60	1.34	1.52	0.99	1.39	1.05	1.05
p70	2.09	2.43	3.01	1.64	1.35	1.41
p80	4.18	3.43	3.41	2.81	1.88	1.97
p90	5.96	5.31	4.29	3.46	3.14	3.00
p95	7.97	7.39	4.77	6.10	5.10	4.14

*Table C6. Comparison of Age 0-9 Egg and Dairy Consumption Empirical Distributions with Parametric Models (g/kg\*day)*

	<b>Dairy</b>		<b>Egg</b>	
	Empirical Distribution	Parametric Model	Empirical Distribution	Parametric Model
Mean	12.0	11.3	3.21	3.23
Std. Dev.	18.7	17.8	3.61	3.63
p5	1.00	0.92	0.50	0.33
p10	1.73	1.39	0.59	0.43
p20	2.38	2.29	0.75	0.69
p30	2.88	3.29	1.06	1.02
p40	3.63	4.47	1.25	1.44
p50	5.44	5.95	1.49	1.97
p60	7.83	7.93	2.41	2.66
p70	9.74	10.8	3.56	3.61
p80	13.6	15.5	5.53	5.03
p90	31.2	25.4	8.00	7.64
p95	51.9	38.4	10.3	10.4

*Table C7. Parametric Models for Ages 0-9 Food Consumption Distributions (g/day).*

Category of Food	Distribution Type	Mean	Std. Dev.	Location	Scale	Shape	Mode	$\alpha$	$\beta$	Anderson-Darling Statistic	$\mu \pm \sigma$
Produce											
Exposed	Gamma			0.00	35.8	1.90				0.4703	
Leafy	Lognormal	26.8	32.3							0.4861	2.75±1.04
Protected	Beta				52.9			1.08	1.25	0.2948	
Root	Extreme Value				21.1		26.2			0.8080	
Meat											
Beef	Extreme Value				21.2		33.1			0.2977	
Chicken	Weibull			8.38	16.6	1.34				0.2455	
Pork	Lognormal	11.6	16.5							0.7499	1.90±1.05
Dairy	Weibull			-28.3	454.2	1.99				0.3151	
Eggs	Lognormal	34.8	24.4							1.7657	3.35±0.63



*Table C8. Parametric Models for Ages 0-70 Food Consumption Distributions (g/day).*

Category of Food	Distribution Type	Mean	Std. Dev.	Location	Scale	Shape	Mode	$\alpha$	$\beta$	Anderson-Darling Statistic	$\mu \pm \sigma$
Produce											
Exposed	Gamma			1.46	47.2	1.8				2.1112	
Leafy	Gamma			1.37	37.6	1.11				1.6287	
Protected	Extreme Value				25.2		35.8			1.9388	
Root	Weibull			-0.20	93.9	1.38				1.0491	
Meat											
Beef	Gamma			0.00	29.9	2.76				1.2260	
Chicken	Lognormal	49.8	32.3							0.7935	3.73±0.59
Pork	Beta				134.3			1.19	6.68	2.3063	
Dairy	Extreme Value				144.2		201.4			2.6660	
Eggs	Lognormal	40.3	25.1							1.7657	3.53±0.57

*Table C9. Parametric Models for Ages 0-9 Food Consumption Distributions (g/day).*

Category of Food	Distribution Type	Mean	Std. Dev.	Location	Scale	Shape	Mode	$\alpha$	$\beta$	Anderson-Darling Statistic	$\mu \pm \sigma$
Produce											
Exposed	Gamma			0.00	35.8	1.90				0.4703	
Leafy	Lognormal	26.8	32.3							0.4861	2.75±1.04
Protected	Beta				52.9			1.08	1.25	0.2948	
Root	Extreme Value				21.1		26.2			0.8080	
Meat											
Beef	Extreme Value				21.2		33.1				
Chicken	Weibull			8.38	16.6	1.34				0.2455	
Pork	Lognormal	11.6	16.5							0.7499	1.90±1.05
Dairy	Weibull			-28.3	454.2	1.99				0.3151	
Eggs	Lognormal	34.8	24.4							1.7657	3.35±0.63

*Table C10. Parametric Models for Ages 0-70 Food Consumption Distributions (g/day).*

Category of Food	Distribution Type	Mean	Std. Dev.	Location	Scale	Shape	Mode	$\alpha$	$\beta$	Anderson-Darling Statistic	$\mu \pm \sigma$
Produce											
Exposed	Gamma			1.46	47.2	1.8				2.1112	
Leafy	Gamma			1.37	37.6	1.11				1.6287	
Protected	Extreme Value				25.2		35.8			1.9388	
Root	Weibull			-0.20	93.9	1.38				1.0491	
Meat											
Beef	Gamma			0.00	29.9	2.76				1.2260	
Chicken	Lognormal	49.8	32.3							0.7935	3.73±0.59
Pork	Beta				134.3			1.19	6.68	2.3063	
Dairy	Extreme Value				144.2		201.4			2.6660	
Eggs	Lognormal	40.3	25.1							1.7657	3.53±0.57

**Table C11. Empirical Distributions for Per Capita Food Consumption Among Ages 0-9 (g/day).**

Category of Food	Cons	Non-Cons	Mean	SD	Skew Ness	Kurtosis	Min *	p01	p05	p10	P20	p30	p40	p50	p60	p70	p80	p90	p95	p99	Max*	
Produce																						
Exposed	88	56	68.1	47.5	1.21	1.40	2.29	2.29	12.8	17.6	31.8	38.9	42.8	63.3	71.9	84.3	97.8	140	170	207	207	
Leafy	60	84	26.2	34.6	3.82	16.6	1.04	1.04	2.18	4.31	8.33	10.3	12.5	16.9	20.7	27.6	35.6	50.5	60.7	192	192	
Protected	41	103	24.5	14.5	0.15	-1.05	1.45	1.45	2.14	6.05	12.1	16.1	18.6	22.8	27.3	37.3	37.3	44.4	47.2	52.4	52.4	
Root	95	49	38.6	27.7	1.07	1.40	0.46	0.46	3.56	4.64	14.2	20.7	28.5	31.0	45.9	50.8	55.1	66.6	98.1	124	124	
Meat																						
Beef	64	80	45.3	27.9	1.38	3.52	2.33	2.33	6.44	15.7	23.1	29.9	37.3	39.5	48.0	56.0	60.4	79.6	92.6	159	159	
Chicken	42	102	23.6	11.4	1.57	3.85	9.33	9.33	10.8	12.8	14.9	16.2	18.0	21.3	24.5	27.2	30.6	36.3	41.5	67.0	67.0	
Pork	40	104	11.0	11.1	2.01	5.99	0.48	0.48	1.39	1.81	2.22	4.44	4.65	5.97	7.22	15.6	19.6	23.6	24.5	56.7	56.7	
Dairy	131	13	374	212	0.58	-0.25	6.52	6.55	79.1	131	168	223	287	343	413	481	548	668	798	892	940	
Eggs	80	64	3.22	3.61	2.14	5.28	0.27	0.27	0.50	0.59	0.75	1.06	1.25	1.49	2.42	3.56	5.54	8.00	10.3	17.9	17.9	

\*Indicates sample minimum or maximum

Total of consumers and nonconsumers equals 144 in each case. The same 144 subjects are represented in each food category.

**Table C12. Empirical Distributions for Per Capita Food Consumption Among Ages 0-70 (g/day).**

Category of Food	Cons	Non-Cons	Mean	SD	Skew Ness	Kurt -osis	Min*	P01	p05	p10	p20	P30	p40	p50	p60	p70	p80	p90	p95	p99	Max *	
Produce																						
Exposed	725	310	86.2	65.2	2.64	15.9	2.63	6.30	14.0	21.0	35.6	47.3	59.7	74.3	95.1	101	125	160	193	281	716	
Leafy	624	411	45.9	45.4	2.67	11.1	1.45	3.55	5.07	5.43	10.8	18.1	26.1	34.9	45.6	53.6	69.7	98.0	123	233	359	
Protected	364	671	51.5	42.8	3.75	24.4	1.18	2.50	9.63	14.1	23.0	29.9	36.0	46.1	48.2	59.1	65.1	99.7	110	200	430	
Root	707	328	75.0	55.2	1.26	2.01	0.54	4.19	8.39	15.2	29.3	42.1	55.0	61.8	73.1	93.5	116	146	187	245	343	
Meat																						
Beef	606	429	82.6	50.6	1.50	3.48	1.70	8.49	22.8	32.2	42.4	51.5	63.2	70.4	80.2	98.4	121	146	179	257	337	
Chicken	416	619	49.5	29.6	1.65	5.01	4.82	8.44	16.1	20.1	25.7	32.6	37.8	42.2	45.8	57.9	69.1	90.0	111	135	245	
Pork	351	684	20.4	16.2	0.91	-0.08	0.42	1.82	2.91	3.63	5.81	8.72	10.2	15.2	20.6	26.7	33.4	46.5	50.9	63.9	66.5	
Dairy	891	144	289	214	2.45	14.0	2.11	8.26	44.2	78.8	127	166	211	229	289	343	422	536	675	966	2388	
Eggs	521	514	40.5	23.7	1.99	6.67	2.27	5.54	17.6	20.1	22.1	25.2	30.2	35.2	40.3	46.3	56.4	64.9	84.6	130	187	

\*Indicates sample minimum or maximum

Total of consumers and nonconsumers in each case equals 1035 in each case. The same 1035 subjects are represented in each food category