

Table 5.34 Summary of the mean intake of nutrients by province* and age group as determined by the 24-H-R

Nutrient	Age group (Years)		
	1 – 3	4 – 6	7 – 9
1. Energy Highest Lowest	WC, KZN, EC NC, FS, MP	WC, KZN, EC FS, NC, NP	WC, KZN, EC FS, G/teng, NC
2. Protein Highest Lowest	WC, KZN, EC NC, FS, MP	WC, KZN, G/teng FS, EC, MP	WC, KZN, NP FS, EC, G/teng
3. CHO Highest Lowest	EC, KZN, WC NC, MP, G/teng	KZN, EC, WC FS, NC, G/teng	KZN, EC, WC NC, G/teng, FS
4. Sugar Highest Lowest	WC, NC, NW FS, NP, MP	WC, EC, G/teng NP, FS, MP	WC, EC, G/teng FS, NP, MP
5. Fat Highest Lowest	WC, KZN, G/teng FS, NP, NC	WC, KZN, G/teng NP, EC, FS	WC, NC, KZN FS, NP, EC
6. Fibre Highest Lowest	KZN, NP, EC NC, FS, NW	KZN, NP, EC NC, FS, NW	KZN, NP, WC NC, G/teng, FS
7. Calcium Highest Lowest	WC, KZN, EC NC, MP, NW	WC, KZN, G/teng NC, NW, MP	WC, KZN, EC MP, NW, FS
8. Phosphorus Highest Lowest	WC, KZN, EC NC, MP, FS	WC, KZN, NW NC, FS, EC	WC, KZN, NP FS, NC, G/teng
9. Iron Highest Lowest	NP, WC, KZN NC, FS, EC	NP, WC, KZN FS, NC, EC	NP, WC, KZN NC, FS, NW
10. Zinc Highest Lowest	WC, KZN, NP NC, FS, MP	WC, KZN, NP G/teng, NW, NC	WC, KZN, NP FS, G/teng, NW
11. Selenium Highest Lowest	WC, NC, EC NP, FS, MP	WC, EC, G/teng NP, MP, FS	WC, KZN, NC NP, FS, MP
12. Magnesium Highest Lowest	KZN, NP, NW NC, G/teng, FS	NP, KZN, NW NC, G/teng, FS	NP, KZN, MP NC, G/teng, EC

Table 5.34(cont'd) Summary of the mean intake of nutrients by province* and age group as determined by the 24-H-R

Nutrient	Age group (Years)		
	1 – 3	4 – 6	7 – 9
13. Vitamin A Highest Lowest	WC, G/teng, NP MP, NC, NW	WC, G/teng, NC MP, FS, NW	MP, NP, WC KZN, G/teng, NW
14. Vitamin D Highest Lowest	WC, G/teng, MP EC, NP, FS	WC, G/teng, KZN EC, NP, NC	WC, NW, G/teng NP, FS, EC
15. Vitamin E Highest Lowest	WC, KZN, EC NP, NC, FS	KZN, WC, NW NP, FS, NC	WC, KZN, NW NP, MP, G/teng
16. Vitamin C Highest Lowest	WC, KZN, G/teng NP, NW, FS	WC, KZN, NW FS, NP, MP	KZN, WC, NW NC, EC, NP
17. Thiamin Highest Lowest	KZN NC	WC, KZN NC, FS	WC, KZN NC, G/teng
18. Riboflavin Highest Lowest	WC, KZN, MP NC	WC, NP, G/teng EC	WC, NP NC, FS
19. Niacin Highest Lowest	WC, MP, G/teng EC, FS, NC	WC, KZN, G/teng EC, FS, NC	WC, MP, G/teng EC, FS, NC
20. Vitamin B₆ Highest Lowest	WC, KZN NC, FS	WC, KZN FS	WC, KZN, MP NC, FS
21. Vitamin B₁₂ Highest Lowest	WC, G/teng, FS EC, MP, KZN	G/teng, WC, KZN MP, NP, EC	MP, WC, NW EC, KZN
22. Folate Highest Lowest	KZN, WC, EC NC, FS, NW	WC, EC, KZN NW, NP, MP	WC, EC, KZN FS, NC, NW

*EC = Eastern Cape, FS = Free State, G/teng = Gauteng, KZN = KwaZulu/Natal, MP = Mpumalanga, NC = Northern Cape, NP = Northern Province, NW = North West, WC = Western Cape

TABLE 5.35 **Frequency of food items eaten by children in South Africa (n = 2868) as determined by the 24-H-R**

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	4360	2226	442	2.0	221
2. White sugar	3277	2187	21	1.5	14
3. Tea	1610	1327	235	1.2	196
4. Whole milk	2106	1200	167	1.8	93
5. Brown bread	1372	1067	101	1.3	78
6. White rice	949	773	140	1.2	117
7. White bread	1077	771	96	1.4	69
8. Hard marg/ine	1077	761	13	1.4	9
9. Chicken	886	726	80	1.2	67
10. Potatoes	815	647	117	1.3	90
11. Beef	594	493	108	1.2	90
12. Fruit (other)*	601	440	159	1.4	114
13. Cabbage gr	496	415	82	1.2	71
14. Squash‡	533	393	295	1.4	211
15. Eggs	410	374	74	1.1	67
16. Green leaves	499	351	142	1.4	101
17. Rooibos tea	426	336	241	1.3	185
18. Sour milk	404	328	310	1.2	258
19. Vg/ble(other)**	378	317	81	1.2	68
20. Non-dairy milk	350	299	7	1.2	6
21. Salty snacks	280	257	30	1.1	27
22. Pumpkin	296	248	92	1.2	77
23. Peanut butter	279	245	14	1.1	13
24. Br. Cereals	243	230	40	1.1	36
25. Legumes	265	228	166	1.2	138

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.36 Frequency of food items eaten by children in the Eastern Cape (n = 424) as determined by the 24-H-R

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. White sugar	538	340	31	1.6	11
2. Maize	567	335	439	1.7	258
3. Tea	251	196	277	1.3	213
4. White rice	190	158	185	1.2	154
5. Whole milk	229	155	159	1.5	106
6. White bread	199	153	102	1.3	78
7. Hard marg/ine	134	102	13	1.3	10
8. Maas/ Sour milk	125	94	369	1.3	284
9. Potatoes	112	94	129	1.2	108
10. Samp+ beans	102	91	350	1.3	269
11. Brown bread	107	85	90	1.1	82
12. Cabbage gr	77	65	87	1.2	73
13. Squash‡	65	53	335	1.2	279
14. Chicken	57	52	68	1.1	62
15. Soup	60	51	181	1.2	151
16. Samp/m rice	56	46	327	1.2	273
17. Pumpkin gr	45	41	106	1.1	96
18. Eggs	44	37	72	1.2	60
19. Magou	46	33	503	1.4	359
20. Coffee	36	32	219	1.1	199
21. Fruit (other)*	37	32	132	1.2	110
22. Peanut butter	33	30	16	1.1	15
23. Salty snacks	28	26	21	1.1	19
24. Rooibos tea	32	26	268	1.2	223
25. Sweets	23	22	24	1.0	24

* Fruit other than vitamin C-rich or vitamin A-rich

‡ Cordial made with water

TABLE 5.37 **Frequency of food items eaten by children in the Free State (n = 208) as determined by the 24-H-R**

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	477	198	541	2.4	225
2. Whole milk	273	137	203	2.0	102
3. White sugar	162	121	16	1.3	12
4. Tea	109	95	220	1.2	183
5. Brown bread	85	71	98	1.2	82
6. Cabbage gr	52	37	84	1.4	60
7. Chicken	47	34	81	1.4	58
8. Potatoes	44	32	112	1.4	80
9. Green leaves	33	26	124	1.3	95
10. Hard marg/rine	26	23	14	1.1	13
11. Beef	27	21	86	1.3	66
12. Fruit (other)*	25	19	162	1.3	125
13. Fruit (vit A)	22	19	195	1.2	163
14. White rice	26	18	102	1.4	73
15. Eggs	19	17	100	1.1	91
16. Vg/ble(other)**	21	17	94	1.2	78
17. Mutton	18	15	120	1.2	100
18. Rooibos tea	16	15	201	1.1	182
19. Pumpkin gr	22	15	103	1.5	69
20. Mabella	16	10	313	1.6	196
21. Pilchards/sard	15	10	143	1.5	95
22. Legumes	12	10	127	1.2	106
23. Squash‡	9	9	228	1.0	228
24. Soup	9	8	105	1.1	95
25. Sugar (brown)	8	7	15	1.1	14

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.38 **Frequency of food items eaten by children in Gauteng (n = 427) as determined by the 24-H-R**

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. White sugar	514	343	18	1.5	12
2. Maize	649	343	369	1.9	194
3. Whole milk	381	233	130	1.6	81
4. Tea	248	201	230	1.2	192
5. Brown bread	256	191	86	1.3	66
6. Hard marg/ine	188	137	12	1.4	9
7. Chicken	147	127	70	1.2	58
8. White bread	152	113	91	1.3	70
9. Beef	132	107	88	1.2	73
10. Fruit (other)*	117	83	149	1.4	106
11. White rice	84	76	117	1.1	106
12. Potatoes	87	74	94	1.2	78
13. Vg/ble(other)**	86	73	84	1.2	70
14. Rooibos tea	96	72	245	1.3	188
15. Eggs	82	72	79	1.1	72
16. Cabbage gr	79	65	72	1.2	60
17. Peanut butter	63	57	11	1.1	10
18. Break. Cereal	56	53	41	1.1	37
19. Green leaves	59	51	110	1.2	92
20. Squash‡	54	44	261	1.2	218
21. Sweet spreads	49	43	17	1.1	15
22. Salty snacks	43	42	31	1.0	31
23. Sour milk	41	39	172	1.1	156
24. Pork & ham	43	35	37	1.2	31
25. Fruit juice	49	35	280	1.4	200

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.39 Frequency of food items eaten by children in KwaZulu/Natal (n = 555) as determined by the 24-H-R

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	881	446	420	2.0	210
2. White sugar	560	423	20	1.3	15
3. Tea	365	314	226	1.2	188
4. White rice	266	208	173	1.3	133
5. Brown bread	253	208	104	1.2	87
6. Hard margarine	248	178	13	1.4	9
7. White bread	220	164	108	1.3	83
8. Sour milk/maas	189	153	334	1.2	278
9. Whole milk	210	146	122	1.4	87
10. Potatoes	200	145	149	1.4	106
11. Chicken	162	140	104	1.2	87
12. Legumes	160	134	199	1.2	166
13. Non-dairy milk	138	115	7	1.2	6
14. Beef	126	103	143	1.2	119
15. Vg/ble(other)**	97	77	71	1.3	55
16. Cabbage group	84	76	103	1.1	94
17. Squash‡	103	75	303	1.4	216
18. Eggs	69	64	62	1.1	56
19. Fruit (other)*	71	56	146	1.3	112
20. Green leaves	61	55	144	1.1	131
21. Pilchards/sard	41	38	79	1.1	72
22. Pumpkin	43	38	107	1.1	97
23. Fruit Juice	52	37	302	1.4	216
24. Pork & ham	39	35	27	1.1	25
25. Salty snacks	34	33	31	1.0	31

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.40 **Frequency of food items eaten by children in Mpumalanga (n = 162) as determined by the 24-H-R**

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	252	131	463	1.9	244
2. White sugar	164	129	17	1.3	13
3. Brown bread	114	98	116	1.2	97
4. Tea	91	82	227	1.1	206
5. Chicken	78	59	76	1.3	60
6. Whole milk	72	44	186	1.6	116
7. Non-dairy milk	43	42	6	1.0	6
8. Beef	37	35	81	1.1	74
9. Potatoes	43	34	98	1.3	75
10. Rooibos tea	35	32	222	1.1	202
11. Cabbage gr	42	32	86	1.3	66
12. Hard marg/rine	35	30	10	1.2	8
13. Eggs	32	29	79	1.1	72
14. Fruit (other)*	33	24	165	1.4	118
15. White rice	32	23	172	1.4	123
16. Vg/ble(other)**	26	21	94	1.2	78
17. White bread	24	17	93	1.4	66
18. Green leaves	30	17	155	1.8	86
19. Gravy	17	16	50	1.1	45
20. Salty snacks	13	13	25	1.0	25
21. Fat (PUS/med)	13	13	7	1.0	7
22. Salads	20	13	73	1.5	49
23. Squash‡	13	12	263	1.1	239
24. Coffee	15	11	237	1.4	169
25. Br. Cereals	11	11	58	1.0	58

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.41 **Frequency of food items eaten by children in Northern Cape (n = 153) as determined by the 24-H-R**

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. White sugar	204	122	24	1.7	14
2. Maize	213	119	400	1.8	222
3. White bread	105	70	75	1.5	50
4. Tea	85	66	215	1.3	165
5. Whole milk	94	63	125	1.5	83
6. White rice	45	34	109	1.3	84
7. Mutton	40	31	136	1.3	105
8. Brown bread	43	29	95	1.5	63
9. Potatoes	35	28	98	1.3	75
10. Coffee	43	26	299	1.7	176
11. Chicken	33	26	80	1.3	62
12. Hard marg/ine	28	22	10	1.3	8
13. Sweet spreads	28	21	23	1.3	18
14. Beef	23	21	87	1.1	79
15. Eggs	22	20	71	1.1	65
16. Pumpkin gr	26	19	115	1.4	82
17. Fruit (other)*	29	18	218	1.6	136
18. Animal fat	24	17	14	1.4	10
19. Cabbage gr	20	16	73	1.3	56
20. Vg/ble(other)**	17	14	76	1.2	63
21. Pichards / sard	13	10	91	1.3	70
22. Peas / Beans	10	10	63	1.0	63
23. Fruit juice	13	10	284	1.3	218
24. Vetkoek	15	9	133	1.7	78
25. Maize samp/rc	9	9	188	1.0	188

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

TABLE 5.42 Frequency of food items eaten by children in Northern Province (n = 352) as determined by the 24-H-R

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	723	334	524	2.2	238
2. White sugar	254	208	16	1.2	13
3. Brown bread	254	205	117	1.2	98
4. Green leaves	271	163	155	1.7	91
5. Tea	167	148	227	1.1	206
6. Chicken	139	101	71	1.4	51
7. Non-dairy milk	68	61	7	1.1	6
8. Rooibos tea	59	55	218	1.1	198
9. Whole milk	70	47	144	1.5	96
10. Beef	63	46	131	1.4	94
11. Fruit (other)*	50	42	151	1.2	126
12. Hard marg/ine	49	40	10	1.2	8
13. Peanut butter	38	33	15	1.2	13
14. Eggs	36	33	77	1.1	70
15. Vg/ble(other)**	42	31	105	1.4	75
16. Squash‡	33	31	244	1.1	222
17. Brown sugar	37	30	14	1.2	12
18. Salty snacks	28	28	29	1.0	29
19. Fruit juice	32	27	244	1.2	203
20. Soup	29	23	145	1.3	112
21. White rice	27	22	171	1.2	143
22. Worms	27	22	63	1.2	53
23. Potatoes	27	22	134	1.2	112
24. Cabbage	27	21	67	1.3	52
25. Pumpkin	25	19	80	1.3	62

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

‡ Cordial made with water

TABLE 5.43 Frequency of food items eaten by children in North West (n = 230) as determined by the 24-H-R

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. Maize	461	209	483	2.2	220
2. White sugar	346	195	22	1.8	12
3. Whole milk	298	147	141	2.0	71
4. Tea	167	138	225	1.2	188
5. Brown bread	104	79	107	1.3	82
6. Cabbage group	66	62	75	1.1	68
7. Chicken	64	57	66	1.1	60
8. Mabella	72	54	343	1.3	264
9. Potatoes	55	46	122	1.2	102
10. Beef	42	35	97	1.2	81
11. Rooibos tea	45	33	256	1.4	183
12. Vg/bles (other)**	32	30	62	1.1	56
13. White rice	33	29	152	1.1	138
14. White bread	30	27	99	1.1	90
15. Hard margarine	31	26	9	1.2	7.5
16. Eggs	27	26	80	1.0	80
17. Pilchards	23	22	87	1.1	79
18. Coffee	31	20	265	1.6	166
19. Fruit (other)*	33	20	154	1.7	91
20. Fruit juice	20	18	254	1.1	231
21. Mutton	17	15	91	1.1	83
22. Vetkoek	15	14	161	1.1	146
23. Milk (non-dairy)	15	13	8	1.2	7
24. Cookies /bisc/ts	13	12	85	1.1	77
25. Green leaves	14	12	89	1.2	74

* Fruit other than vitamin C-rich or vitamin A-rich

** Vegetables other than green leafy, cabbage group or pumpkin group

TABLE 5.44 Frequency of food items eaten by children in Western Cape (n = 357) as determined by the 24-H-R

Food item	No of times eaten	No of children eating it	Total ^a amount eaten/day (g)	Ave ^b portions per day	Portion size (g) ^{a/b}
1. White sugar	535	306	23	1.7	14
2. Whole milk	479	228	247	2.1	118
3. White rice	246	205	82	1.2	68
4. Hard marg/ine	338	203	17	1.7	10
5. White bread	316	203	89	1.6	56
6. Potatoes	212	172	99	1.2	83
7. Squash‡	238	153	307	1.6	192
8. Fruit (other)*	206	146	169	1.4	121
9. Chicken	159	130	85	1.2	71
10. Maize	137	111	278	1.2	232
11. Break. Cereal	115	111	38	1.0	38
12. Beef	124	105	108	1.2	90
13. Brown bread	156	101	90	1.5	60
14. Salty snacks	114	95	32	1.2	27
15. Sweets	107	87	28	1.2	23
16. Tea	127	87	252	1.5	168
17. Fruit juice	111	77	224	1.4	160
18. Eggs	79	76	70	1.0	70
19. Rooibos tea	101	71	250	1.4	179
20. Pumpkin gr	81	71	82	1.1	75
21. Pork & Ham	87	69	47	1.3	36
22. Sweet spr/ds	91	69	24	1.3	18
23. Coffee	82	67	214	1.2	178
24. Peanut butter	77	64	16	1.2	13
25. Cheese	67	54	24	1.2	20

* Fruit other than vitamin C-rich or vitamin A-rich

‡ Cordial made with water

Table 5.45 Univariate Analysis of risk factors for a child being stunted in children aged 1 – 9 years

Height-for-Age

Risk factors	% < - 2 SD	% > 0	OR (95 % CI)
Food intake variables			
Number (n)	558	605	
1. On bread: H marg/none	81	70	1.75* (1.35 – 2.33)
2. Milk: Non dairy creamer	16	15	1.12 (0.82 – 1.56)
3. Bread: Brown	58	53	1.22 (0.97 – 1.54)
4. Child shared a plate	11	10	1.15 (0.79 – 1.67)
5. Granny decides on food	32	27	1.28 (0.99 – 1.64)
Poverty-related variables			
1. Father not head of household	62	55	1.30* (1.03 – 1.64)
2. Reside in mud or tin house	35	20	2.13* (1.64 – 2.78)
3. More than 4 share room	14	10	1.47* (1.03 – 2.13)
4. Mother is unemployed	54	44	1.49* (1.18 – 1.85)
5. Father is unemployed	17	14	1.32 (0.96 – 1.82)
6. One person contributes to income	64	51	1.68* (1.33 – 2.12)
7. Income less than R1000/month	44	29	1.92* (1.52 – 2.44)
8. Less than R150 on food/week	57	49	1.39* (1.10 – 1.75)
Environmental factors			
1. Use communal tap or river	46	30	1.92* (1.52 – 2.44)
2. Use bucket toilet	8	4	1.79* (1.09 – 2.94)
Food preparation variables			
1. Use paraffin or fire to cook	53	30	2.56* (2.00 – 3.23)
2. No cold storage facilities	60	34	2.94* (2.33 – 3.70)
3. Use a primus stove	57	42	1.85* (1.47 – 2.33)
4. Have no hot plate	78	75	1.18 (0.90 – 1.54)
5. Have no stove	52	36	1.92* (1.52 – 2.38)
Educational variables			
1. Mother has pr/ary or less schooling	43	24	2.38* (1.85 – 3.03)
2. Caregiver has pr/ary or less sc/ling	31	20	1.72* (1.28 – 2.27)
3. No radio or TV in the house	20	9	2.44* (1.72 – 3.45)

* Denotes a significant association

Table 5.46 Univariate Analysis of risk factors of a child being underweight in children aged 1 – 9 years

Weight-for-Age

Risk Factors	% < - 1.5 SD	% > 0.5 SD	OR (95 % CI)
Food intake variables			
Number (n)	561	448	
1. On bread: H marg/none	80	72	1.52* (1.14 – 2.04)
2. Milk: Non dairy creamer	14	14	1.00 (0.70 – 1.45)
3. Bread: Brown	60	54	1.28 (1.00 – 1.64)
4. Child shared a plate	12	8	1.54 (1.00 – 2.38)
5. Granny decides on food	34	26	1.52* (1.15 – 2.00)
Poverty-related variables			
1. Father not head of household	60	53	1.33* (1.04 – 1.72)
2. Reside in mud or tin house	31	21	1.64* (1.23 – 2.22)
3. More than 4 share room	14	8	1.92* (1.28 – 2.94)
4. Mother is unemployed	49	47	1.10 (0.85 – 1.41)
5. Father is unemployed	15	13	1.18 (0.83 – 1.69)
6. One person earns to income	62	53	1.44* (1.12 – 1.85)
7. Income less than R1000/month	43	31	1.64* (1.27 – 2.13)
8. Less than R150 on food/week	55	45	1.45* (1.14 – 1.85)
Environmental factors			
1. Use communal tap or river	42	29	1.75* (1.35 – 2.27)
2. Use bucket toilet	8	5	1.69* (1.01 – 2.86)
Food preparation variables			
1. Use paraffin or fire to cook	50	29	2.38* (1.82 – 3.03)
2. No cold storage facilities	58	33	2.94* (2.22 – 3.70)
3. Use a primus stove	57	41	1.89* (1.45 – 2.38)
4. Have no hot plate	76	74	1.12 (0.84 – 1.49)
5. Have no stove	51	36	1.82* (1.41 – 2.33)
Educational variables			
1. Mother with ≤primary schooling	44	23	2.70* (2.04 – 3.57)
2. C/giver with ≤primary schooling	34	17	2.56* (1.89 – 3.45)
3. No radio or TV in the house	19	10	2.17* (1.49 – 3.23)

* Denotes a significant association