

**Table 8.1 Hunger risk classification in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification (%) | Area of Residence |              |                |        |       |       |      |
|--------------------------------|-------------------|--------------|----------------|--------|-------|-------|------|
|                                | Com/rcial Farms   | Formal Urban | Informal Urban | Tribal | Urban | Rural | RSA  |
| Number (n)                     | 299               | 1060         | 287            | 1089   | 1347  | 1388  | 2735 |
| Food secure                    | 23                | 41           | 21             | 11     | 36    | 14    | 25   |
| At risk of hunger              | 29                | 23           | 18             | 23     | 22    | 24    | 23   |
| Experience hunger              | 48                | 37           | 61             | 66     | 42    | 62    | 52   |

\* Significant difference between urban and rural groups,  $p < 0.01$ , Chi-square test

\*\* Significant difference between 4 types of residence,  $p < 0.01$ , Chi-square test

**Table 8.2 Hunger risk classification in children aged 1 – 9 years nationally and by age: South Africa 1999**

| Hunger risk classification (%) | Age groups  |             |             |      |
|--------------------------------|-------------|-------------|-------------|------|
|                                | 1 - 3 Years | 4 - 6 Years | 7 - 9 Years | RSA  |
| Number (n)                     | 1251        | 1034        | 450         | 2735 |
| Food secure                    | 24          | 25          | 26          | 25   |
| At risk of hunger              | 22.5        | 22          | 27          | 23   |
| Experience hunger              | 53          | 53          | 47          | 52   |

\* No significant difference among age groups, Chi-square test used

**Table 8.3 Hunger risk classification in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification (%) | Province |      |        |      |      |      |      |      |      |      |
|--------------------------------|----------|------|--------|------|------|------|------|------|------|------|
|                                | EC       | FS   | G/TENG | KZN  | M/GA | NC   | NP   | NW   | WC   | RSA  |
| Number (n)                     | 398      | 209  | 409    | 525  | 150  | 144  | 332  | 226  | 342  | 2735 |
| Food secure                    | 4.3      | 45.5 | 36.7   | 26.7 | 21.3 | 13.2 | 19.3 | 13.3 | 39.8 | 25.0 |
| At risk of hunger              | 12.6     | 16.8 | 21.5   | 25.9 | 26.0 | 23.6 | 26.2 | 25.2 | 29.0 | 22.9 |
| Experience hunger              | 83.2     | 37.8 | 41.8   | 47.4 | 52.7 | 63.2 | 54.5 | 61.5 | 31.3 | 52.2 |

\* Significant difference between provinces,  $p < 0.01$ , Chi-square test

**Table 8.4 Hunger risk classification as related to anthropometric status of children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification  |                          | Area of Residence [Mean (sd)] |                        |                      |                       |                         |                         |                          |
|---|--------------------------|-------------------------------|------------------------|----------------------|-----------------------|-------------------------|-------------------------|--------------------------|
|   |                          | Com/rcial Farms               | Formal Urban           | Informal Urban       | Tribal                | Urban                   | Rural                   | RSA                      |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 277<br>(66; 80; 131)          | 956<br>(388; 220; 357) | 268<br>(53; 48; 167) | 960<br>(107;212; 641) | 1233<br>(441; 268; 524) | 1237<br>(173; 292; 772) | 2735<br>(683; 625; 1427) |
| <b>H/A</b>  | <b>Food secure</b>       | -0.9*<br>(1.4) [a]            | -0.3**<br>(1.4) [a]    | -1.0<br>(1.3)        | -1.2<br>(1.4)         | -0.4**<br>(1.4) [a]     | -1.1<br>(1.4)           | -0.6**<br>(1.5) [a]      |
|   | <b>At risk of hunger</b> | -1.6<br>(1.4) [b]             | -0.8<br>(1.4) [b]      | -0.8<br>(1.4)        | -1.0<br>(1.6)         | -0.8<br>(1.4) [b]       | -1.1<br>(1.6)           | -1.0<br>(1.5) [b]        |
|   | <b>Experience hunger</b> | -1.2<br>(1.5) [a][b]          | -1.0<br>(1.5) [b]      | -0.9<br>(1.4)        | -1.1<br>(1.5)         | -1.0<br>(1.5) [b]       | -1.1<br>(1.5)           | -1.1<br>(1.5) [b]        |
| <b>W/A</b>  | <b>Food secure</b>       | -0.7<br>(1.2)                 | 0.0**<br>(1.3) [a]     | -0.2<br>(1.4)        | -0.8<br>(1.1)         | -0.1**<br>(1.3) [a]     | -0.7<br>(1.1)           | -0.2**<br>(1.3) [a]      |
|   | <b>At risk of hunger</b> | -1.0<br>(1.3)                 | -0.4<br>(1.3) [b]      | -0.6<br>(1.1)        | -0.7<br>(1.3)         | -0.4<br>(1.2) [b]       | -0.8<br>(1.3)           | -0.6<br>(1.3) [b]        |
|   | <b>Experience hunger</b> | -1.1<br>(1.1)                 | -0.7<br>(1.3) [c]      | -0.5<br>(1.2)        | -0.7<br>(1.1)         | -0.6<br>(1.3) [b]       | -0.8<br>(1.1)           | -0.7<br>(1.2) [b]        |
| <b>W/H</b>  | <b>Food secure</b>       | -0.2<br>(1.0)                 | 0.3**<br>(1.3) [a]     | 0.6<br>(1.7) [a]     | 0.0<br>(1.1)          | 0.3**<br>(1.4) [a]      | -0.1<br>(1.1)           | 0.2**<br>(1.3) [a]       |
|   | <b>At risk of hunger</b> | 0.0<br>(1.4)                  | 0.2<br>(1.3) [a][b]    | 0.0<br>(1.1) [b]     | -0.1<br>(1.3)         | 0.2<br>(1.3) [a][b]     | 0.0<br>(1.3)            | 0.047<br>(1.3) [a][b]    |
|   | <b>Experience hunger</b> | -0.4<br>(1.1)                 | 0.0<br>(1.3) [b]       | 0.1<br>(1.1) [a][b]  | 0.0<br>(1.2)          | 0.0<br>(1.2) [b]        | -0.1<br>(1.2)           | -0.036<br>(1.2) [b]      |

H/A = Height-for-Age; W/A = Weight-for-Age; W/H = Weight-for-Height

\*Kruskal-Wallis test for three samples; significant for P&lt;0.05; \*\*Kruskal-Wallis test for three samples, significant for P&lt;0.01

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test, p&lt;0.05

**Table 8.5 Hunger risk classification as related to anthropometric status in children aged 1 – 9 years by age group: South Africa 1999**

| Hunger risk classification  |                          | Age group [Mean (sd)]   |                        |                        |                          |
|---|--------------------------|-------------------------|------------------------|------------------------|--------------------------|
|   |                          | Age 1 - 3 years         | Age 4 - 6 years        | Age 7 - 9 years        | RSA                      |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 1139<br>(278; 251; 610) | 922<br>(229; 202; 491) | 409<br>(107; 107; 195) | 2735<br>(683; 625; 1427) |
| <b>H/A</b>  | <b>Food secure</b>       | -0.7**<br>(1.6) [a]     | -0.6**<br>(1.4) [a]    | -0.4**<br>(1.2) [a]    | -0.6**<br>(1.5) [a]      |
|   | <b>At risk of hunger</b> | -1.0<br>(1.6) [b]       | -1.0<br>(1.6) [b]      | -0.9<br>(1.0) [b]      | -1.0<br>(1.5) [b]        |
|   | <b>Experience hunger</b> | -1.2<br>(1.6) [b]       | -1.0<br>(1.4) [b]      | -0.9<br>(1.3) [b]      | -1.1<br>(1.5) [b]        |
| <b>W/A</b>  | <b>Food secure</b>       | -0.4**<br>(1.3) [a]     | -0.2**<br>(1.4) [a]    | -0.1**<br>(1.3) [a]    | -0.2**<br>(1.3) [a]      |
|   | <b>At risk of hunger</b> | -0.6<br>(1.5) [a][b]    | -0.5<br>(1.2) [b]      | -0.7<br>(0.9) [b]      | -0.6<br>(1.3) [b]        |
|   | <b>Experience hunger</b> | -0.7<br>(1.3) [b]       | -0.7<br>(1.1) [b]      | -0.8<br>(1.0) [b]      | -0.7<br>(1.2) [b]        |
| <b>W/H</b>  | <b>Food secure</b>       | 0.2<br>(1.3)            | 0.2*<br>(1.3) [a]      | 0.2*<br>(1.4) [a]      | 0.2**<br>(1.3) [a]       |
|   | <b>At risk of hunger</b> | 0.1<br>(1.4)            | 0.1<br>(1.3) [a][b]    | -0.1<br>(1.1) [a][b]   | 0.047<br>(1.3) [a][b]    |
|   | <b>Experience hunger</b> | 0.0<br>(1.2)            | -0.1<br>(1.2) [b]      | -0.2<br>(1.2) [a]      | -0.036<br>(1.2) [b]      |

H/A = Height-for-Age; W/A = Weight-for-Age; W/H = Weight-for-Height

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

**Table 8.6 Hunger risk classification as related to anthropometric status in children aged 1 – 9 years by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)] |                    |                      |                      |                     |                     |                    |                      |                      |                             |
|---|--------------------------|----------------------|--------------------|----------------------|----------------------|---------------------|---------------------|--------------------|----------------------|----------------------|-----------------------------|
|   |                          | EC                   | FS                 | G/TENG               | KZN                  | M/GA                | NC                  | NP                 | NW                   | WC                   | RSA                         |
| <b>Total n</b><br>[food secure (n);<br>risk of hunger (n);<br>experience (n)] |                          | 355<br>(16;41;298)   | 203<br>(94; 33;76) | 391<br>(146; 83;162) | 442<br>(111;115;216) | 129<br>(28; 35; 66) | 124<br>(11; 31; 82) | 295<br>(55;80;160) | 221<br>(29;55;137)   | 310<br>(124; 87; 99) | 2735<br>(683; 625;<br>1427) |
| <b>H/A</b>  | <b>Food secure</b>       | -0.5<br>(1.5)        | -1.1<br>(1.3)      | -0.6*<br>(1.6)       | -0.5*<br>(1.4)       | -0.6<br>(1.5)       | -0.8<br>(1.3)       | -0.9<br>(1.6)      | -0.8<br>(1.5)        | -0.1**<br>(1.2) [a]  | -0.6**<br>(1.5) [a]         |
|   | <b>At risk of hunger</b> | -0.9<br>(1.4)        | -1.6<br>(1.6)      | -0.7<br>(1.3)        | -0.7<br>(1.6)        | -0.6<br>(1.8)       | -1.3<br>(1.8)       | -1.2<br>(1.5)      | -1.3<br>(1.4)        | -0.9<br>(1.4) [b]    | -1.0<br>(1.5) [b]           |
|   | <b>Experience hunger</b> | -1.0<br>(1.5)        | -1.5<br>(1.5)      | -1.0<br>(1.5)        | -0.9<br>(1.5)        | -1.2<br>(1.8)       | -1.2<br>(1.7)       | -1.0<br>(1.3)      | -1.2<br>(1.3)        | -0.9<br>(1.2) [b]    | -1.1<br>(1.5) [b]           |
| <b>W/A</b>  | <b>Food secure</b>       | 0.1<br>(1.2)         | -0.7<br>(1.2)      | -0.1*<br>(1.4) [a]   | -0.1**<br>(1.2) [a]  | -0.1<br>(1.3)       | -1.0<br>(1.8)       | -0.7<br>(1.1)      | -1.1<br>(1.3)        | 0.2**<br>(1.3) [a]   | -0.2**<br>(1.3) [a]         |
|   | <b>At risk of hunger</b> | -0.4<br>(1.2)        | -1.0<br>(1.4)      | -0.4<br>(1.2) [a][b] | -0.3<br>(1.2) [a][b] | -0.3<br>(1.5)       | -0.8<br>(1.6)       | -0.9<br>(1.1)      | -1.0<br>(1.1)        | -0.6<br>(1.3) [b]    | -0.6<br>(1.3) [b]           |
|   | <b>Experience hunger</b> | -0.4<br>(1.2)        | -0.9<br>(1.1)      | -0.6<br>(1.2)[b]     | -0.6<br>(1.1) [b]    | -0.2<br>(1.4)       | -1.2<br>(1.2)       | -1.0<br>(1.0)      | -1.1<br>(1.0)        | -0.8<br>(1.2) [b]    | -0.7<br>(1.2) [b]           |
| <b>W/H</b>  | <b>Food secure</b>       | 0.7<br>(1.0)         | 0.0<br>(1.3)       | 0.4<br>(1.4)         | 0.3*<br>(1.2)        | 0.5<br>(1.5)        | -0.5<br>(1.4)       | -0.1<br>(1.2)      | -0.9<br>(1.2) [b]    | 0.4**<br>(1.2) [a]   | 0.2**<br>(1.3) [a]          |
|   | <b>At risk of hunger</b> | 0.2<br>(0.9)         | 0.1<br>(1.2)       | 0.1<br>(1.2)         | 0.3<br>(1.4)         | 0.2<br>(1.8)        | 0.0<br>(1.8)        | -0.2<br>(1.3)      | -0.3<br>(0.9)[a]     | 0.0<br>(1.2) [b]     | 0.047<br>(1.3) [a][b]       |
|   | <b>Experience hunger</b> | 0.3<br>(1.2)         | 0.0<br>(1.3)       | 0.1<br>(1.1)         | 0.0<br>(1.2)         | 0.7<br>(1.3)        | -0.5<br>(1.2)       | -0.5<br>(1.2)      | -0.5<br>(0.9) [a][b] | -0.2<br>(1.1) [b]    | -0.036<br>(1.2) [b]         |

H/A = Height-for-Age; W/A = Weight-for-Age; W/H = Weight-for-Height; \*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

**Table 8.7 Hunger risk classification as related to the intake of energy and selected micronutrients in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification  |                          | Area of Residence [Mean (sd)] |                       |                       |                       |                       |                       |                        |
|---|--------------------------|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
|   |                          | Com/rcial Farms               | Formal Urban          | Informal Urban        | Tribal                | Urban                 | Rural                 | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 295<br>(69; 86;140)           | 1046<br>(425;235;386) | 285<br>(59; 53;173)   | 1081<br>(123;243;715) | 1331<br>(484;288;559) | 1376<br>(192;329;855) | 2707<br>(676;617;1414) |
| <b>Energy (kJ)</b>  | <b>Food secure</b>       | 4543**<br>(2318) [a]          | 5681**<br>(2493) [a]  | 5058**<br>(2146) [a]  | 4835**<br>(2155)      | 5605**<br>(2460) [a]  | 4730**<br>(2213) [a]  | 5356**<br>(2423) [a]   |
|   | <b>At risk of hunger</b> | 4770<br>(2078) [a][b]         | 5295<br>(2175) [a]    | 5335<br>(1872) [a][b] | 5084<br>(2264)        | 5302<br>(2119) [a]    | 5002<br>(2218) [a][b] | 5142<br>(2176) [a]     |
|   | <b>Experience hunger</b> | 3841<br>(1817) [b]            | 4632<br>(2294) [b]    | 4357<br>(1939) [b]    | 4577<br>(2219)        | 4548<br>(2193) [b]    | 4456<br>(2174) [b]    | 4492<br>(2181) [b]     |
| <b>Vit.C (mg)</b>   | <b>Food secure</b>       | 46.3<br>(102) [a]             | 54.0**<br>(80.0) [a]  | 51.6<br>(199)         | 24.6<br>(39.5)        | 53.7**<br>(101) [a]   | 32.4<br>(69.6)        | 47.6**<br>(94.0) [a]   |
|   | <b>At risk of hunger</b> | 28.8<br>(39.6) [a][b]         | 36.7<br>(82.5) [b]    | 34.2<br>(56.2)        | 42.5<br>(347)         | 36.3<br>(78.2) [b]    | 38.9<br>(298)         | 37.7<br>(224) [a][b]   |
|   | <b>Experience hunger</b> | 22.1<br>(36.8) [b]            | 31.0<br>(74.5) [b]    | 28.8<br>(48.0)        | 24.5<br>(72.7)        | 30.3<br>(67.4) [b]    | 24.1<br>(68.1)        | 26.6<br>(67.9) [b]     |
| <b>Vit.A (RE)</b>   | <b>Food secure</b>       | 296**<br>(482)                | 629**<br>(1203)       | 266*<br>(262)         | 266<br>(390)          | 584**<br>(1138)       | 277*<br>(425)         | 497**<br>(998) [a]     |
|   | <b>At risk of hunger</b> | 366<br>(676)                  | 503<br>(1396)         | 381<br>(585)          | 356<br>(1551)         | 481<br>(1286)         | 359<br>(1376)         | 415<br>(1335) [a][b]   |
|   | <b>Experience hunger</b> | 253<br>(652)                  | 532<br>(1398)         | 337<br>(832)          | 288<br>(484)          | 471<br>(1352)         | 282<br>(515)          | 357<br>(888) [b]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

**Table 8.8 Hunger risk classification as related to the intake of selected micronutrients in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification  |                          | Area of Residence [Mean (sd)] |                       |                     |                       |                       |                       |                        |
|---|--------------------------|-------------------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|------------------------|
|   |                          | Com/rcial Farms               | Formal Urban          | Informal Urban      | Tribal                | Urban                 | Rural                 | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 295<br>(69; 86;140)           | 1046<br>(425;235;386) | 285<br>(59; 53;173) | 1081<br>(123;243;715) | 1331<br>(484;288;559) | 1376<br>(192;329;855) | 2707<br>(676;617;1414) |
| <b>Iron (mg)</b>  | <b>Food secure</b>       | 4.5*<br>(2.9)                 | 7.3**<br>(3.9) [a]    | 5.3**<br>(2.8)      | 5.8<br>(3.5)          | 7.0**<br>(3.9) [a]    | 5.4<br>(3.4)          | 6.5**<br>(3.8) [a]     |
|   | <b>At risk of hunger</b> | 4.6<br>(2.6)                  | 6.2<br>(4.2) [b]      | 5.4<br>(2.7)        | 5.2<br>(3.8)          | 6.0<br>(4.0) [b]      | 5.8<br>(5.4)          | 5.9<br>(4.8) [b]       |
|   | <b>Experience hunger</b> | 3.9<br>(2.8)                  | 4.8<br>(3.7) [c]      | 4.7<br>(4.6)        | 5.8<br>(4.8)          | 4.8<br>(4.0) [c]      | 5.5<br>(4.6)          | 5.2<br>(4.4) [c]       |
| <b>Zinc (mg)</b>  | <b>Food secure</b>       | 4.6**<br>(2.9)                | 6.2**<br>(3.5) [a]    | 5.3**<br>(3.2)      | 5.1**<br>(3.0) [a]    | 6.1**<br>(3.5) [a]    | 4.9**<br>(2.9) [a]    | 5.7**<br>(3.4) [a]     |
|   | <b>At risk of hunger</b> | 4.7<br>(2.9)                  | 5.6<br>(3.0) [a]      | 5.1<br>(2.8)        | 5.2<br>(3.8) [a]      | 5.5<br>(3.0) [b]      | 5.0<br>(3.5) [a]      | 5.3<br>(3.3) [b]       |
|   | <b>Experience hunger</b> | 3.7<br>(2.4)                  | 4.6<br>(3.1) [b]      | 4.3<br>(3.0)        | 4.1<br>(2.7) [b]      | 4.5<br>(3.1) [c]      | 4.1<br>(2.6) [b]      | 4.2<br>(2.8) [c]       |
| <b>Ca<sup>++</sup> (mg)</b>   | <b>Food secure</b>       | 330**<br>(288) [a]            | 439**<br>(329) [a]    | 336*<br>(378)       | 276<br>(227)          | 426**<br>(337) [a]    | 296**<br>(251)        | 389**<br>(320) [a]     |
|   | <b>At risk of hunger</b> | 249<br>(163) [a][b]           | 355<br>(294) [b]      | 344<br>(243)        | 321<br>(334)          | 353<br>(285) [b]      | 303<br>(300)          | 326<br>(294) [b]       |
|   | <b>Experience hunger</b> | 224<br>(232) [b]              | 267<br>(236) [c]      | 273<br>(279)        | 282<br>(313)          | 269<br>(250) [c]      | 273<br>(302)          | 271<br>(282) [c]       |

Ca<sup>++</sup>Calcium; \*Kruskal-Wallis test for three samples; significant for P<0.05; \*\*Kruskal-Wallis test for three samples, significant for P<0.01; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test, p<0.05

**Table 8.9 Hunger risk classification as related to the intake of energy and selected micronutrients in children aged 1 – 9 years nationally and by age group: South Africa 1999**

| Hunger risk classification  |                          | Age group [Mean (sd)] |                       |                       |                        |
|---|--------------------------|-----------------------|-----------------------|-----------------------|------------------------|
|   |                          | Age 1 - 3 years       | Age 4 - 6 years       | Age 7 - 9 years       | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 1238<br>(297;279;662) | 1027<br>(262;221;544) | 442<br>(117;117;208)  | 2707<br>(676;617;1414) |
| <b>Energy (kJ)</b>  | <b>Food secure</b>       | 4354**<br>(1888) [a]  | 5989**<br>(2485) [a]  | 6485**<br>(2534) [a]  | 5356**<br>(2423) [a]   |
|   | <b>At risk of hunger</b> | 4472<br>(1889) [a]    | 5624<br>(2267) [a]    | 5830<br>(2202) [a][b] | 5142<br>(2176) [a]     |
|   | <b>Experience hunger</b> | 3983<br>(1950) [b]    | 4813<br>(2231) [b]    | 5278<br>(2357) [b]    | 4492<br>(2181) [b]     |
| <b>Vit.C (mg)</b>   | <b>Food secure</b>       | 48.3<br>(112) [a]     | 45.4<br>(73.0) [a]    | 51.0<br>(85.1)        | 47.6**<br>(94.0) [a]   |
|   | <b>At risk of hunger</b> | 30.9<br>(71.7) [b]    | 26.1<br>(42.4) [b]    | 75.8<br>(499)         | 37.7<br>(224) [a][b]   |
|   | <b>Experience hunger</b> | 22.5<br>(47.4) [b]    | 29.8<br>(80.8) [b]    | 31.3<br>(83.7)        | 26.6<br>(67.9) [b]     |
| <b>Vit.A (RE)</b>   | <b>Food secure</b>       | 418**<br>(861)        | 569**<br>(1142)       | 536**<br>(971)        | 497**<br>(998) [a]     |
|   | <b>At risk of hunger</b> | 338<br>(483)          | 436<br>(1573)         | 562<br>(2042)         | 415<br>(1335) [a][b]   |
|   | <b>Experience hunger</b> | 327<br>(703)          | 366<br>(1029)         | 430<br>(1006)         | 357<br>(888) [b]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

**Table 8.10 Hunger risk classification as related to the intake of selected micronutrients in children aged 1 – 9 years nationally and by age group: South Africa 1999**

| Hunger risk classification  |                          | Age group [Mean (sd)] |                       |                      |                        |
|---|--------------------------|-----------------------|-----------------------|----------------------|------------------------|
|   |                          | Age 1 - 3 years       | Age 4 - 6 years       | Age 7 - 9 years      | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 1238<br>(297;279;662) | 1027<br>(262;221;544) | 442<br>(117;117;208) | 2707<br>(676;617;1414) |
| <b>Iron (mg)</b>  | <b>Food secure</b>       | 5.3<br>(3.1) [a]      | 7.3<br>(4.0) [a]      | 7.9<br>(4.2) [a]     | 6.5**<br>(3.8) [a]     |
|   | <b>At risk of hunger</b> | 4.8<br>(3.3) [a][b]   | 6.7<br>(4.9) [a]      | 7.0<br>(6.6) [a][b]  | 5.9<br>(4.8) [b]       |
|   | <b>Experience hunger</b> | 4.5<br>(4.1) [b]      | 5.8<br>(4.4) [b]      | 6.2<br>(4.9) [b]     | 5.2<br>(4.4) [c]       |
| <b>Zinc (mg)</b>  | <b>Food secure</b>       | 4.7**<br>(2.5) [a]    | 6.3**<br>(3.5) [a]    | 6.9**<br>(4.1) [a]   | 5.7**<br>(3.4) [a]     |
|   | <b>At risk of hunger</b> | 4.5<br>(2.7) [a]      | 6.0<br>(3.3) [a]      | 5.8<br>(4.0) [b]     | 5.3<br>(3.3) [b]       |
|   | <b>Experience hunger</b> | 3.8<br>(2.5) [b]      | 4.5<br>(2.9) [b]      | 5.0<br>(3.4) [b]     | 4.2<br>(2.8) [c]       |
| <b>Ca<sup>++</sup> (mg)</b>   | <b>Food secure</b>       | 375<br>(349) [a]      | 393<br>(297) [a]      | 416<br>(292) [a]     | 389**<br>(320) [a]     |
|   | <b>At risk of hunger</b> | 340<br>(312) [a][b]   | 336<br>(288) [b]      | 273<br>(255) [b]     | 326<br>(294) [b]       |
|   | <b>Experience hunger</b> | 287<br>(315) [b]      | 249<br>(236) [c]      | 278<br>(281) [b]     | 271<br>(282) [c]       |

Ca<sup>++</sup> = Calcium

\*Kruskal-Wallis test for three samples; significant for P&lt;0.05; \*\*Kruskal-Wallis test for three samples, significant for P&lt;0.01

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test, p&lt;0.05

**Table 8.11 Hunger risk classification as related to the intake of energy and selected micronutrients in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)]  |                        |                      |                      |                       |                     |                       |                       |                      |                        |
|---|--------------------------|-----------------------|------------------------|----------------------|----------------------|-----------------------|---------------------|-----------------------|-----------------------|----------------------|------------------------|
|   |                          | EC                    | FS                     | G/TENG               | KZN                  | M/GA                  | NC                  | NP                    | NW                    | WC                   | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 392<br>(17;47;328)    | 206<br>(93;35;78)      | 407<br>(150;87;170)  | 524<br>(140;136;248) | 148<br>(31;39;78)     | 140<br>(19;32;89)   | 326<br>(62;86;178)    | 222<br>(28;56;138)    | 342<br>(136;99;107)  | 2707<br>(676;617;1414) |
| <b>Energy (kJ)</b>  | <b>Food secure</b>       | 6821**<br>(3019) [a]  | 4115**<br>(1915)[a][b] | 4711**<br>(1954) [a] | 5672<br>(2054)       | 5264**<br>(1762) [a]  | 4217<br>(3086)      | 4999*<br>(2680) [a]   | 5529*<br>(3274) [a]   | 6716**<br>(2422) [a] | 5356**<br>(2423) [a]   |
|   | <b>At risk of hunger</b> | 5511<br>(2082) [a][b] | 4670<br>(2019) [a]     | 4534<br>(1780) [a]   | 5646<br>(2138)       | 4870<br>(2436) [a][b] | 4310<br>(2004)      | 4401<br>(2054) [a][b] | 5152<br>(2518) [a][b] | 5992<br>(2024) [b]   | 5142<br>(2176) [a]     |
|   | <b>Experience hunger</b> | 4974<br>(2363) [b]    | 3363<br>(2217) [b]     | 3790<br>(1351) [b]   | 5331<br>(2266)       | 3930<br>(1917) [b]    | 3649<br>(2151)      | 4000<br>(1820) [b]    | 4336<br>(2055) [b]    | 5144<br>(2113) [c]   | 4492<br>(2181) [b]     |
| <b>Vit.C (mg)</b>   | <b>Food secure</b>       | 41.4**<br>(32.8) [a]  | 22.9<br>(47.0)         | 50.9**<br>(86.1) [a] | 52.4<br>(141)        | 35.5<br>(80.1)        | 45.2<br>(118)       | 31.0**<br>(40.9) [a]  | 29.5<br>(71.7)        | 71.1**<br>(86.3) [a] | 47.6**<br>(94.0) [a]   |
|   | <b>At risk of hunger</b> | 23.6<br>(49.1) [a][b] | 13.9<br>(18.6)         | 25.5<br>(42.1) [b]   | 75.9<br>(471)        | 21.3<br>(43.4)        | 21.2<br>(33.0)      | 15.3<br>(26.0) [b]    | 30.4<br>(38.9)        | 46.3<br>(48.2) [b]   | 37.7<br>(224) [a][b]   |
|   | <b>Experience hunger</b> | 20.3<br>(30.9) [b]    | 17.3<br>(24.5)         | 21.1<br>(36.0) [b]   | 40.7<br>(107)        | 21.9<br>(62.7)        | 29.1<br>(96.4)      | 14.7<br>(35.1) [b]    | 36.9<br>(102)         | 36.5<br>(45.2) [b]   | 26.6<br>(67.9) [b]     |
| <b>Vit.A (RE)</b>   | <b>Food secure</b>       | 794**<br>(1186) [a]   | 466*<br>(1161)         | 507**<br>(1054)      | 295**<br>(282)       | 229<br>(252)          | 781*<br>(1681) [a]  | 529<br>(1230)         | 377*<br>(723)         | 710**<br>(1131)      | 497**<br>(998) [a]     |
|   | <b>At risk of hunger</b> | 229<br>(237) [b]      | 205<br>(197)           | 243<br>(330)         | 436<br>(1873)        | 943<br>(3397)         | 196 [b]<br>(199)    | 384<br>(805)          | 247<br>(508)          | 687<br>(871)         | 415<br>(1335) [a][b]   |
|   | <b>Experience hunger</b> | 310<br>(752) [b]      | 233<br>(541)           | 462<br>(1612)        | 311<br>(525)         | 285<br>(755)          | 278<br>(778) [a][b] | 490<br>(623)          | 321<br>(930)          | 473<br>(990)         | 357<br>(888) [b]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

**Table 8.12 Hunger risk classification as related to the intake of selected micronutrients in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)] |                     |                     |                       |                     |                   |                     |                    |                     |                        |
|---|--------------------------|----------------------|---------------------|---------------------|-----------------------|---------------------|-------------------|---------------------|--------------------|---------------------|------------------------|
|   |                          | EC                   | FS                  | G/TENG              | KZN                   | M/GA                | NC                | NP                  | NW                 | WC                  | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 392<br>(17;47;328)   | 206<br>(93;35;78)   | 407<br>(150;87;170) | 524<br>(140;136;248)  | 148<br>(31;39;78)   | 140<br>(19;32;89) | 326<br>(62;86;178)  | 222<br>(28;56;138) | 342<br>(136;99;107) | 2707<br>(676;617;1414) |
| <b>Iron (mg)</b>  | <b>Food secure</b>       | 8.4**<br>(3.9) [a]   | 4.5**<br>(3.4) [a]  | 6.0**<br>(3.3) [a]  | 6.6*<br>(3.6)         | 6.3<br>(4.0)        | 4.2<br>(3.2)      | 7.3<br>(4.4)        | 6.0**<br>(3.4)     | 8.4**<br>(3.7) [a]  | 6.5**<br>(3.8) [a]     |
|   | <b>At risk of hunger</b> | 5.1<br>(3.1) [b]     | 4.0<br>(2.8) [a][b] | 5.0<br>(2.7) [a][b] | 5.8<br>(4.0)          | 5.1<br>(3.5)        | 4.3<br>(2.6)      | 8.7<br>(9.1)        | 5.5<br>(3.5)       | 6.7<br>(3.4) [b]    | 5.9<br>(4.8) [b]       |
|   | <b>Experience hunger</b> | 4.5<br>(3.1) [b]     | 3.1<br>(2.6) [b]    | 4.4<br>(4.2) [b]    | 6.1<br>(4.4)          | 5.1<br>(3.4)        | 3.5<br>(3.0)      | 8.5<br>(6.7)        | 4.4<br>(3.5)       | 5.4<br>(3.3) [c]    | 5.2<br>(4.4) [c]       |
| <b>Zinc (mg)</b>  | <b>Food secure</b>       | 7.7**<br>(3.7) [a]   | 4.2**<br>(2.6) [a]  | 4.8**<br>(2.7) [a]  | 5.9**<br>(2.6) [a]    | 5.2**<br>(2.2) [a]  | 4.9<br>(4.1)      | 6.0**<br>(4.0) [a]  | 5.0*<br>(2.8)      | 7.5**<br>(4.1) [a]  | 5.7**<br>(3.4) [a]     |
|   | <b>At risk of hunger</b> | 4.5<br>(2.5) [b]     | 4.0<br>(2.5) [a][b] | 4.7<br>(2.5) [a]    | 5.6<br>(2.8) [a][b]   | 4.9<br>(3.1) [a][b] | 4.4<br>(3.4)      | 5.9<br>(4.9) [a][b] | 5.2<br>(3.2)       | 6.2<br>(3.1) [b]    | 5.3<br>(3.3) [b]       |
|   | <b>Experience hunger</b> | 4.0<br>(2.4) [b]     | 3.1<br>(2.3) [b]    | 3.9<br>(2.1) [b]    | 5.0<br>(3.3) [b]      | 3.8<br>(2.0) [b]    | 3.9<br>(3.5)      | 4.4<br>(3.0) [b]    | 4.1<br>(2.8)       | 5.1<br>(3.1) [b]    | 4.2<br>(2.8) [c]       |
| <b>Ca<sup>++</sup> (mg)</b>   | <b>Food secure</b>       | 534**<br>(211) [a]   | 313**<br>(230)      | 338**<br>(277) [a]  | 392**<br>(348) [a][b] | 258<br>(212)        | 221<br>(171)      | 247<br>(220)        | 255<br>(154)       | 622**<br>(368) [a]  | 389**<br>(320) [a]     |
|   | <b>At risk of hunger</b> | 343<br>(317) [a][b]  | 292<br>(244)        | 250<br>(174) [b]    | 416<br>(345) [a]      | 265<br>(266)        | 222<br>(177)      | 267<br>(328)        | 268<br>(219)       | 413<br>(307) [b]    | 326<br>(294) [b]       |
|   | <b>Experience hunger</b> | 319<br>(373) [b]     | 212<br>(237)        | 237<br>(208) [b]    | 314<br>(326) [b]      | 193<br>(148)        | 175<br>(179)      | 269<br>(235)        | 228<br>(196)       | 317<br>(243) [b]    | 271<br>(282) [c]       |

Ca<sup>++</sup>= Calcium; \*Kruskal-Wallis test for three samples; significant for P<0.05; \*\*Kruskal-Wallis test for three samples, significant for P<0.01; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test, p<0.05

**Table 8.13 Hunger risk classification as related to food procurement in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification  |                          | Area of Residence [Mean (sd)] |                       |                    |                       |                       |                       |                        |
|---|--------------------------|-------------------------------|-----------------------|--------------------|-----------------------|-----------------------|-----------------------|------------------------|
|   |                          | Com/rcial Farms               | Formal Urban          | Informal Urban     | Tribal                | Urban                 | Rural                 | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 289<br>(68;84;137)            | 1017<br>(416;227;374) | 274<br>(57;50;167) | 1077<br>(119;245;714) | 1291<br>(473;277;541) | 1366<br>(186;329;851) | 2657<br>(659;606;1392) |
| <b>Items in proc.</b>   | <b>Food secure</b>       | 34.1<br>(24.0)                | 53.9**<br>(28.3) [a]  | 34.6<br>(15.2)     | 29.0*<br>(15.8) [a]   | 51.6**<br>(27.8) [a]  | 30.8**<br>(19.3) [a]  | 45.8**<br>(27.3) [a]   |
|   | <b>At risk of hunger</b> | 34.1<br>(17.3)                | 46.6<br>(22.3) [b]    | 36.6<br>(16.4)     | 28.0<br>(12.7) [a][b] | 44.8<br>(21.7) [b]    | 29.5<br>(14.2) [a]    | 36.5<br>(19.6) [b]     |
|   | <b>Experience hunger</b> | 29.2<br>(17.5)                | 34.5<br>(18.2) [c]    | 32.4<br>(14.9)     | 25.5<br>(13.0) [b]    | 33.9<br>(17.2) [c]    | 26.1<br>(13.9) [b]    | 29.1<br>(15.7) [c]     |
| <b>Anim. in proc.</b>   | <b>Food secure</b>       | 7.6<br>(5.2)                  | 12.4**<br>(6.8) [a]   | 7.9<br>(3.9)       | 6.4**<br>(3.9) [a]    | 11.8**<br>(3.7) [a]   | 6.8**<br>(4.5) [a]    | 10.4**<br>(6.5) [a]    |
|   | <b>At risk of hunger</b> | 7.4<br>(4.0)                  | 10.6<br>(5.6) [b]     | 8.4<br>(3.9)       | 6.1<br>(3.2) [a]      | 10.2<br>(5.4) [b]     | 6.5<br>(3.4) [a]      | 8.2<br>(4.8) [b]       |
|   | <b>Experience hunger</b> | 6.5<br>(4.1)                  | 7.7<br>(4.6) [c]      | 7.3<br>(3.7)       | 5.3<br>(3.2) [b]      | 7.6<br>(4.3) [c]      | 5.5<br>(3.4) [b]      | 6.3<br>(3.9) [c]       |
| <b>Dairy in proc.</b>   | <b>Food secure</b>       | 2.1**<br>(1.8) [a]            | 3.5**<br>(2.3) [a]    | 2.2*<br>(1.4)      | 1.7**<br>(1.4) [a]    | 3.4**<br>(2.3) [a]    | 1.8**<br>(1.6) [a]    | 2.9**<br>(2.2) [a]     |
|   | <b>At risk of hunger</b> | 1.7<br>(1.1) [a][b]           | 2.8<br>(1.9) [b]      | 2.3<br>(1.5)       | 1.5<br>(1.1) [a][b]   | 2.7<br>(1.8) [b]      | 1.6<br>(1.1) [b]      | 2.1<br>(1.6) [b]       |
|   | <b>Experience hunger</b> | 1.3<br>(1.1) [b]              | 1.9<br>(1.4) [c]      | 1.8<br>(1.4)       | 1.3<br>(1.0) [b]      | 1.8<br>(1.4) [c]      | 1.3<br>(1.0) [c]      | 1.5<br>(1.2) [c]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

Proc. = Procurement; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.14 Hunger risk classification as related to procurement in children aged 1 – 9 years by age group: South Africa 1999**

| Hunger risk classification  |                          | Age group [Mean (sd)]   |                         |                        |                        |
|---|--------------------------|-------------------------|-------------------------|------------------------|------------------------|
|   |                          | Age 1 - 3 years         | Age 4 - 6 years         | Age 7 - 9 years        | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 1213<br>(289; 275; 649) | 1006<br>(257; 214; 535) | 438<br>(113; 117; 208) | 2657<br>(659;606;1392) |
| <b>Items in proc</b>  | <b>Food secure</b>       | 42.9**<br>(26.0) [a]    | 46.9**<br>(28.6) [a]    | 50.5**<br>(26.9) [a]   | 45.8**<br>(27.3) [a]   |
|   | <b>At risk of hunger</b> | 35.8<br>(20.0) [b]      | 37.3<br>(18.9) [b]      | 37.0<br>(19.9) [b]     | 36.5<br>(19.6) [b]     |
|   | <b>Experience hunger</b> | 28.8<br>(16.2) [c]      | 29.2<br>(15.1) [c]      | 29.9<br>(15.7) [c]     | 29.1<br>(15.7) [c]     |
| <b>Anim. in proc.</b>   | <b>Food secure</b>       | 9.7**<br>(6.0) [a]      | 10.7**<br>(7.0) [a]     | 11.5**<br>(6.4) [a]    | 10.4**<br>(6.5) [a]    |
|   | <b>At risk of hunger</b> | 8.1<br>(4.9) [b]        | 8.3<br>(4.7) [b]        | 8.2<br>(4.6) [b]       | 8.2<br>(4.8) [b]       |
|   | <b>Experience hunger</b> | 6.2<br>(4.0) [c]        | 6.3<br>(3.8) [c]        | 6.5<br>(3.9) [c]       | 6.3<br>(3.9) [c]       |
| <b>Dairy in proc.</b>   | <b>Food secure</b>       | 2.8**<br>(2.0) [a]      | 3.0**<br>(2.4) [a]      | 3.2**<br>(2.2) [a]     | 2.9**<br>(2.2) [a]     |
|   | <b>At risk of hunger</b> | 2.1<br>(1.6) [b]        | 2.0<br>(1.6) [b]        | 1.9<br>(1.6) [b]       | 2.1<br>(1.6) [b]       |
|   | <b>Experience hunger</b> | 1.5<br>(1.2) [c]        | 1.5<br>(1.2) [c]        | 1.5<br>(1.2) [b]       | 1.5<br>(1.2) [c]       |

\*Kruskal-Wallis test for three samples; significant for P<0.05; \*\*Kruskal-Wallis test for three samples, significant for P<0.01

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test, p<0.05; Proc. = Procurement; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.15 Hunger risk classification as related to procurement in children aged 1 – 9 years by province: South Africa 1999**

| Hunger risk classification   |                          | Province [Mean (sd)] |                      |                      |                      |                      |                     |                      |                      |                      |                         |
|--|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|----------------------|-------------------------|
|  |                          | EC                   | FS                   | G/TENG               | KZN                  | M/GA                 | NC                  | NP                   | NW                   | WC                   | RSA                     |
| <b>Total n [food secure (n); risk of hunger (n); experience (n)]</b> |                          | 395<br>(16;50;329)   | 206<br>(94;34;78)    | 352<br>(134;71;147)  | 521<br>(138;137;246) | 147<br>(30; 39; 78)  | 144<br>(19; 34;91)  | 330<br>(63;87;180)   | 220<br>(29;55;136)   | 342<br>(136;99;107)  | 2657<br>(659;606; 1392) |
| <b>Items in proc.</b>  | <b>Food secure</b>       | 17.3*<br>(23.9) [a]  | 17.8**<br>(8.9) [a]  | 50.1**<br>(23.9) [a] | 44.3**<br>(18.9) [a] | 39.9**<br>(21.0) [a] | 24.1**<br>(9.4) [a] | 23.1**<br>(14.9) [a] | 40.7**<br>(12.7) [a] | 78.0**<br>(20.3) [a] | 45.8**<br>(27.3) [a]    |
|  | <b>At risk of hunger</b> | 36.6<br>(11.6) [b]   | 14.4<br>(5.5) [a][b] | 35.7<br>(16.1) [b]   | 38.3<br>(12.4) [b]   | 27.3<br>(15.4) [b]   | 31.0<br>(10.8) [b]  | 19.1<br>(11.0) [a]   | 36.9<br>(11.3) [a]   | 63.0<br>(19.6) [b]   | 36.5<br>(19.6) [b]      |
|  | <b>Experience hunger</b> | 34.0<br>(10.8) [b]   | 13.6<br>(6.3) [b]    | 30.6<br>(12.8) [b]   | 32.6<br>(13.0) [c]   | 16.9<br>(10.3) [c]   | 19.9<br>(10.3) [b]  | 14.4<br>(10.1) [b]   | 30.4<br>(8.2) [b]    | 55.5<br>(16.8) [c]   | 29.1<br>(15.7) [c]      |
| <b>Anim. in proc.</b>  | <b>Food secure</b>       | 11.3**<br>(6.0) [a]  | 3.8**<br>(2.3) [a]   | 12.0**<br>(5.9) [a]  | 9.6**<br>(4.7) [a]   | 9.0**<br>(5.2) [a]   | 4.5**<br>(2.4) [a]  | 5.8**<br>(4.2) [a]   | 9.6**<br>(3.5) [a]   | 17.7**<br>(4.8) [a]  | 10.4**<br>(6.5) [a]     |
|  | <b>At risk of hunger</b> | 8.2<br>(3.6) [b]     | 3.1<br>(1.4) [a][b]  | 8.6<br>(4.2) [b]     | 8.1<br>(3.1) [b]     | 6.2<br>(3.4) [b]     | 6.6<br>(3.0) [b]    | 4.7<br>(3.4) [a]     | 8.1<br>(2.8) [b]     | 14.2<br>(5.3) [b]    | 8.2<br>(4.8) [b]        |
|  | <b>Experience hunger</b> | 7.4<br>(3.2) [b]     | 2.7<br>(1.6) [b]     | 7.2<br>(3.4) [b]     | 6.5<br>(3.2) [c]     | 3.9<br>(2.8) [c]     | 4.4<br>(1.0) [b]    | 3.2<br>(2.8) [b]     | 6.5<br>(2.3) [c]     | 12.4<br>(4.4) [c]    | 6.3<br>(3.9) [c]        |
| <b>Dairy in proc.</b>  | <b>Food secure</b>       | 3.3**<br>(1.8) [a]   | 1.0**<br>(0.5) [a]   | 3.1**<br>(2.0) [a]   | 3.1**<br>(1.8) [a]   | 2.2**<br>(1.8) [a]   | 0.8<br>(0.6)        | 1.7**<br>(1.6) [a]   | 2.2**<br>(1.2) [a]   | 5.1**<br>(2.1) [a]   | 2.9**<br>(2.2) [a]      |
|  | <b>At risk of hunger</b> | 2.5<br>(1.5) [b]     | 1.0<br>(0.3) [a][b]  | 2.2<br>(1.4) [b]     | 2.4<br>(1.2) [b]     | 1.4<br>(1.1) [b]     | 1.1<br>(1.0)        | 0.9<br>(1.0) [b]     | 1.6<br>(1.0) [b]     | 3.6<br>(1.9) [b]     | 2.1<br>(1.6) [b]        |
|  | <b>Experience hunger</b> | 2.1<br>(1.2) [b]     | 0.8<br>(0.5) [a]     | 1.4<br>(1.1) [c]     | 1.6<br>(1.1) [c]     | 0.8<br>(0.8) [b]     | 0.8<br>(0.7)        | 0.6<br>(0.7) [b]     | 1.3<br>(0.7) [b]     | 3.1<br>(1.6) [b]     | 1.5<br>(1.2) [c]        |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test;  $p < 0.05$ ; Proc. = Procurement; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.16 Hunger risk classification as related to the HH inventory in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification  |                          | Area of Residence [Mean (sd)] |                       |                     |                       |                      |                       |                       |
|---|--------------------------|-------------------------------|-----------------------|---------------------|-----------------------|----------------------|-----------------------|-----------------------|
|   |                          | Com/rcial Farms               | Formal Urban          | Informal Urban      | Tribal                | Urban                | Rural                 | RSA                   |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 182<br>(53; 52; 77)           | 413<br>(122; 79; 212) | 138<br>(31; 24; 83) | 913<br>(97; 208; 608) | 551<br>(153;103;295) | 1095<br>(150;260;685) | 1646<br>(303;363;980) |
| <b>Items in inv.</b>  | <b>Food secure</b>       | 9.6<br>(7.4)                  | 13.8**<br>(13.8) [a]  | 10.2<br>(7.3)       | 12.3**<br>(8.9) [a]   | 13.1**<br>(12.8) [a] | 11.3**<br>(8.5) [a]   | 12.2**<br>(10.9) [a]  |
|   | <b>At risk of hunger</b> | 10.4<br>(7.8)                 | 12.1<br>(9.0) [a][b]  | 8.5<br>(6.1)        | 9.3<br>(5.8) [b]      | 11.3<br>(8.5) [a]    | 9.5<br>(6.3) [b]      | 10.0<br>(7.0) [b]     |
|   | <b>Experience hunger</b> | 8.0<br>(6.0)                  | 9.1<br>(7.4) [b]      | 8.0<br>(6.0)        | 6.5<br>(4.6) [c]      | 8.8<br>(7.1) [b]     | 6.7<br>(4.8) [c]      | 7.3<br>(5.7) [c]      |
| <b>Anim. in inv.</b>  | <b>Food secure</b>       | 1.3<br>(1.7)                  | 2.9**<br>(3.7) [a]    | 1.4<br>(1.8)        | 2.1**<br>(2.3) [a]    | 2.6**<br>(3.4) [a]   | 1.8**<br>(2.1) [a]    | 2.2**<br>(2.9) [a]    |
|   | <b>At risk of hunger</b> | 1.5<br>(1.8)                  | 2.2<br>(2.6) [a]      | 1.3<br>(1.8)        | 1.3<br>(1.6) [b]      | 2.0<br>(2.4) [a]     | 1.3<br>(1.7) [b]      | 1.5<br>(1.9) [b]      |
|   | <b>Experience hunger</b> | 0.9<br>(1.4)                  | 1.2<br>(1.6) [b]      | 0.8<br>(1.1)        | 0.6<br>(1.0) [c]      | 1.1<br>(1.5) [b]     | 0.6<br>(1.1) [c]      | 0.8<br>(1.2) [c]      |
| <b>Dairy in inv.</b>  | <b>Food secure</b>       | 0.4<br>(0.6)                  | 1.0**<br>(1.3) [a]    | 0.6*<br>(0.8)       | 0.7**<br>(0.9) [a]    | 0.9**<br>(1.2) [a]   | 0.6**<br>(0.8) [a]    | 0.8**<br>(1.1) [a]    |
|   | <b>At risk of hunger</b> | 0.5<br>(0.6)                  | 0.8<br>(1.2) [a]      | 0.7<br>(1.0)        | 0.5<br>(0.7) [b]      | 0.8<br>(1.1) [a]     | 0.5<br>(0.7) [a]      | 0.6<br>(0.9) [b]      |
|   | <b>Experience hunger</b> | 0.4<br>(0.6)                  | 0.3<br>(0.6) [b]      | 0.3<br>(0.5)        | 0.3<br>(0.5) [c]      | 0.3<br>(0.6) [b]     | 0.3<br>(0.5) [b]      | 0.3<br>(0.5) [c]      |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$ ; Inv. = Inventory; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.17 Hunger risk classification as related to the HH inventory in children aged 1 – 9 years nationally and by age: South Africa 1999**

| Hunger risk classification  |                          | Age group [Mean (sd)]   |                        |                      |                       |
|---|--------------------------|-------------------------|------------------------|----------------------|-----------------------|
|   |                          | Age 1 - 3 years         | Age 4 - 6 years        | Age 7 - 9 years      | RSA                   |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 1631<br>(126; 162; 428) | 654<br>(128; 132; 394) | 276<br>(49; 69; 158) | 1646<br>(303;363;980) |
| <b>Items in inv.</b>  | <b>Food secure</b>       | 11.3**<br>(10.8) [a]    | 12.7**<br>(10.7) [a]   | 13.2**<br>(12.0) [a] | 12.2**<br>(10.9) [a]  |
|   | <b>At risk of hunger</b> | 9.4<br>(5.9) [b]        | 11.4<br>(8.5) [a]      | 8.8<br>(5.9) [b]     | 10.0<br>(7.0) [b]     |
|   | <b>Experience hunger</b> | 7.3<br>(5.4) [c]        | 7.1<br>(5.7) [b]       | 7.9<br>(6.1) [b]     | 7.3<br>(5.7) [c]      |
| <b>Anim. in inv.</b>  | <b>Food secure</b>       | 1.9**<br>(2.5) [a]      | 2.2**<br>(3.0) [a]     | 2.8**<br>(3.4) [a]   | 2.2**<br>(2.9) [a]    |
|   | <b>At risk of hunger</b> | 1.3<br>(1.6) [b]        | 1.9<br>(2.4) [a]       | 1.1<br>(1.6) [b]     | 1.5<br>(1.9) [b]      |
|   | <b>Experience hunger</b> | 0.7<br>(1.2) [c]        | 0.7<br>(1.3) [b]       | 0.8<br>(1.3) [b]     | 0.8<br>(1.2) [c]      |
| <b>Dairy in inv.</b>  | <b>Food secure</b>       | 0.7**<br>(0.9) [a]      | 0.8**<br>(1.2) [a]     | 0.9**<br>(1.1) [a]   | 0.8**<br>(1.1) [a]    |
|   | <b>At risk of hunger</b> | 0.6<br>(0.8) [a]        | 0.7<br>(1.0) [a]       | 0.4<br>(0.7) [b]     | 0.6<br>(0.9) [b]      |
|   | <b>Experience hunger</b> | 0.3<br>(0.5) [b]        | 0.3<br>(0.5) [b]       | 0.3<br>(0.6) [b]     | 0.3<br>(0.5) [c]      |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$ ; Inv. = Inventory; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.18 Hunger risk classification as related to the HH inventory in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)] |                    |                       |                     |                      |                   |                     |                     |                  |                       |
|---|--------------------------|----------------------|--------------------|-----------------------|---------------------|----------------------|-------------------|---------------------|---------------------|------------------|-----------------------|
|   |                          | EC                   | FS                 | G/TENG                | KZN                 | M/GA                 | NC                | NP                  | NW                  | WC               | RSA                   |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 330<br>(10;35;285)   | 178<br>(84;27;67)  | 148<br>(38;31;79)     | 300<br>(50;82;168)  | 135<br>(25;34;76)    | 62<br>(9; 14; 39) | 318<br>(61;87;170)  | 110<br>(12;24;74)   | 65<br>(14;29;22) | 1646<br>(303;363;980) |
| <b>Items in inv.</b>  | <b>Food secure</b>       | 12.8*<br>(8.5)       | 6.4**<br>(6.9) [a] | 10.0*<br>(10.5)       | 17.2**<br>(9.3) [a] | 17.1**<br>(14.9) [a] | 10.4*<br>(2.3)    | 13.8**<br>(9.8) [a] | 10.0**<br>(7.3) [a] | 21.9<br>(19.6)   | 12.2**<br>(10.9) [a]  |
|   | <b>At risk of hunger</b> | 11.5<br>(5.6)        | 3.9<br>(2.4) [b]   | 10.6<br>(6.2)         | 10.3<br>(6.1) [b]   | 10.2<br>(5.8) [b]    | 9.1<br>(4.3)      | 9.0<br>(6.1) [b]    | 9.0<br>(6.3) [a][b] | 16.8<br>(12.7)   | 10.0<br>(7.0) [b]     |
|   | <b>Experience hunger</b> | 9.2<br>(6.8)         | 3.2<br>(2.1) [b]   | 7.3<br>(4.8)          | 7.4<br>(5.2) [c]    | 6.4<br>(5.2) [b]     | 6.9<br>(4.1)      | 6.2<br>(4.3) [c]    | 5.6<br>(4.2) [b]    | 13.7<br>(7.2)    | 7.3<br>(5.7) [c]      |
| <b>Anim. in inv.</b>  | <b>Food secure</b>       | 1.7*<br>(1.8) [a]    | 1.0<br>(2.1)       | 1.5**<br>(3.1) [a][b] | 2.7**<br>(2.4) [a]  | 4.0**<br>(4.1) [a]   | 0.9<br>(0.8)      | 3.3**<br>(2.8) [a]  | 1.3*<br>(1.8)       | 3.4<br>(4.0)     | 2.2**<br>(2.9) [a]    |
|   | <b>At risk of hunger</b> | 0.9<br>(1.2) [a][b]  | 0.6<br>(0.7)       | 2.1<br>(1.9) [a]      | 1.4<br>(1.6) [b]    | 2.2<br>(1.8) [b]     | 0.9<br>(1.4)      | 1.5<br>(1.9) [b]    | 1.4<br>(2.0)        | 2.4<br>(3.6)     | 1.5<br>(1.9) [b]      |
|   | <b>Experience hunger</b> | 0.7<br>(1.2) [b]     | 0.4<br>(0.7)       | 0.9<br>(1.1) [b]      | 0.6<br>(1.2) [c]    | 1.2<br>(1.6) [b]     | 0.6<br>(0.8)      | 0.9<br>(1.4) [b]    | 0.4<br>(0.8)        | 1.5<br>(1.6)     | 0.8<br>(1.2) [c]      |
| <b>Dairy in inv.</b>  | <b>Food secure</b>       | 1.0*<br>(1.1) [a]    | 0.4<br>(0.6)       | 0.6**<br>(1.1) [a][b] | 0.9**<br>(1.0) [a]  | 0.9<br>(1.2) [a]     | 0.4<br>(0.5)      | 1.1**<br>(1.3) [a]  | 0.3<br>(0.7)        | 1.1<br>(1.7)     | 0.8**<br>(1.1) [a]    |
|   | <b>At risk of hunger</b> | 0.5<br>(0.8) [b]     | 0.3<br>(0.5)       | 0.9<br>(1.0) [a]      | 0.7<br>(0.8) [a]    | 0.6<br>(0.6) [a][b]  | 0.3<br>(0.6)      | 0.5<br>(0.7) [b]    | 0.5<br>(0.9)        | 0.8<br>(1.5)     | 0.6<br>(0.9) [b]      |
|   | <b>Experience hunger</b> | 0.3<br>(0.6) [b]     | 0.3<br>(0.5)       | 0.2<br>(0.5) [b]      | 0.3<br>(0.6) [b]    | 0.4<br>(0.6) [b]     | 0.3<br>(0.4)      | 0.3<br>(0.5) [b]    | 0.2<br>(0.4)        | 0.5<br>(0.6)     | 0.3<br>(0.5) [c]      |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$ ; Inv. = Inventory; Anim. = Foods of animal origin; Dairy = Dairy products

**Table 8.19 Hunger risk classification as related to the type of dwelling and maternal education in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification   |                          | Area of Residence [Mean (sd)] |                       |                       |                       |                       |                       |                        |
|--|--------------------------|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
|  |                          | Com/rcial Farms               | Formal Urban          | Informal Urban        | Tribal                | Urban                 | Rural                 | RSA                    |
| <b>Total n</b><br>[food secure (n1); risk of hunger (n2); experience (n3)] |                          | 292<br>(69;87;136)            | 1050<br>(426;239;385) | 282<br>(59; 51; 172)  | 1074<br>(122;242;710) | 1332<br>(485;290;557) | 1366<br>(191;329;846) | 2698<br>(676;619;1403) |
| <b>Type of dwelling</b> <sup>\$</sup>                                      | <b>Food secure</b>       | 1.2**<br>(0.6) [b]            | 1.2**<br>(0.6) [b]    | 1.8**<br>(1.0) [b]    | 1.3**<br>(0.6) [b]    | 1.2**<br>(0.7) [a]    | 1.3**<br>(0.6) [b]    | 1.3**<br>(0.7) [a]     |
|  | <b>At risk of hunger</b> | 1.5<br>(1.0) [b]              | 1.3<br>(0.7) [b][a]   | 2.2<br>(1.3) [a]      | 1.5<br>(0.7) [a]      | 1.4<br>(0.9) [b]      | 1.5<br>(0.8) [a]      | 1.5<br>(0.9) [b]       |
|  | <b>Experience hunger</b> | 1.9<br>(1.4) [a]              | 1.4<br>(0.8) [a]      | 2.6<br>(1.0) [a]      | 1.6<br>(0.7) [a]      | 1.7<br>(1.0) [c]      | 1.6<br>(0.9) [a]      | 1.7<br>(0.9) [c]       |
| <b>Total n</b><br>[food secure (n1); risk of hunger (n2); experience (n3)] |                          | 279<br>(67;84;128)            | 974<br>(398;217;359)  | 254<br>(49; 48;158)   | 964<br>(111;217;636)  | 1228<br>(447;264;517) | 1243<br>(178;301;764) | 2471<br>(625;565;1281) |
| <b>Educ. &amp; Level of mother</b>   | <b>Food secure</b>       | 2.7*<br>(1.1) [a]             | 3.8**<br>(1.0) [a]    | 2.9**<br>(1.1) [a][b] | 3.1**<br>(1.1) [a]    | 3.7**<br>(1.0) [a]    | 3.0**<br>(1.1) [a]    | 3.5**<br>(1.1) [a]     |
|  | <b>At risk of hunger</b> | 2.3<br>(0.8) [b]              | 3.5<br>(0.9) [b]      | 3.2<br>(1.1) [a]      | 2.9<br>(1.0) [a]      | 3.5<br>(1.0) [b]      | 2.7<br>(1.0) [b]      | 3.1<br>(1.1) [b]       |
|  | <b>Experience hunger</b> | 2.2<br>(0.9) [b]              | 2.9<br>(1.1) [c]      | 2.6<br>(0.9) [b]      | 2.5<br>(1.1) [b]      | 2.8<br>(1.0) [c]      | 2.4<br>(1.0) [c]      | 2.6<br>(1.1) [c]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$ ; \$Type of dwelling: 1 = rick/concrete; 2 = Traditional mud; 3 = Tin; 4 = Plank/wood; 5 = Other. The mean and standard deviation presented in this table is the mean of categories 1 to 5. A lower mean indicates a more formal dwelling & Educ. = Education level of mother: 1 = None; 2 = Primary school; 3 = Std 6-8; 4 = Std 9-10; 5 = Tertiary. The mean and standard deviation presented in this table is the mean of categories 1 to 5. The higher the mean, the higher the level of education of the mother

**Table 8.20 Hunger risk classification as related to the type of dwelling and maternal education in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)] |                     |                     |                      |                     |                     |                     |                     |                     |                        |
|---|--------------------------|----------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|
|   |                          | EC                   | FS                  | G/TENG              | KZN                  | M/GA                | NC                  | NP                  | NW                  | WC                  | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 390<br>(17;50;323)   | 209<br>(95;35;79)   | 406<br>(148;88;170) | 517<br>(139;135;243) | 145<br>(31;38;76)   | 137<br>(18;34;85)   | 328<br>(63;84;181)  | 226<br>(30;57;139)  | 340<br>(135;98;107) | 2698<br>(676;619;1403) |
| <b>Type of dwelling<sup>\$</sup></b>                                    | <b>Food secure</b>       | 1.5<br>(1.1)         | 1.5**<br>(0.8) [b]  | 1.5**<br>(0.9) [b]  | 1.2**<br>(0.4) [b]   | 1.0<br>(0.2)        | 1.1**<br>(0.5) [b]  | 1.1**<br>(0.3) [b]  | 1.4<br>(0.8)        | 1.0**<br>(0.3) [b]  | 1.3**<br>(0.7) [a]     |
|   | <b>At risk of hunger</b> | 1.6<br>(0.8)         | 1.7<br>(1.0) [b][a] | 1.9<br>(1.0) [a]    | 1.5<br>(0.9) [a]     | 1.1<br>(0.4)        | 1.2<br>(0.8) [b][a] | 1.2<br>(0.5) [b][a] | 1.5<br>(0.8)        | 1.3<br>(0.9) [b]    | 1.5<br>(0.9) [b]       |
|   | <b>Experience hunger</b> | 1.7<br>(0.8)         | 1.9<br>(0.9) [a]    | 2.1<br>(1.0) [a]    | 1.7<br>(0.9) [a]     | 1.2<br>(0.5)        | 1.9<br>(1.5) [a]    | 1.3<br>(0.5) [a]    | 1.4<br>(0.7)        | 1.9<br>(1.2) [a]    | 1.7<br>(0.9) [c]       |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 351<br>(16;47;288)   | 194<br>(88;32;74)   | 386<br>(144;83;159) | 410<br>(110;102;198) | 142<br>(29;38;75)   | 121<br>(15;30;76)   | 316<br>(61;81;174)  | 217<br>(29;55;133)  | 334<br>(133;97;104) | 2471<br>(625;565;1281) |
| <b>Educ. &amp; Level of mother</b>                                      | <b>Food secure</b>       | 3.6**<br>(1.0) [a]   | 2.8*<br>(1.0)       | 3.6**<br>(1.0) [a]  | 3.4**<br>(1.2) [a]   | 3.4*<br>(1.2) [a]   | 3.1**<br>(0.9) [a]  | 3.7**<br>(1.2) [a]  | 3.3*<br>(1.0) [a]   | 3.9**<br>(1.0) [a]  | 3.5**<br>(1.1) [a]     |
|   | <b>At risk of hunger</b> | 3.2<br>(0.9) [a][b]  | 1.8<br>(1.1)        | 3.2<br>(1.1) [b]    | 3.0<br>(1.0) [b]     | 3.1<br>(1.1) [a][b] | 2.7<br>(1.3) [a][b] | 3.2<br>(1.1) [b]    | 2.9<br>(1.0) [a][b] | 3.2<br>(1.0) [b]    | 3.1<br>(1.1) [b]       |
|   | <b>Experience hunger</b> | 2.7<br>(1.1) [b]     | 2.4<br>(1.0)        | 2.8<br>(0.9) [c]    | 2.5<br>(1.1) [c]     | 2.7<br>(1.2) [b]    | 2.2<br>(1.0) [b]    | 2.6<br>(1.2) [c]    | 2.7<br>(1.0) [b]    | 2.7<br>(0.9) [c]    | 2.6<br>(1.1) [c]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

<sup>\$</sup>Type of dwelling: 1 = Brick/concrete; 2 = Traditional mud; 3 = Tin; 4 = Plank/wood; 5 = Other. The mean and standard deviation presented in this table is the mean of categories 1 to 5. A lower mean indicates a more formal dwelling

&Educ. = Education level of mother: 1 = None; 2 = Primary school; 3 = Std 6-8; 4 = Std 9-10; 5 = Tertiary. The mean and standard deviation presented in this table is the mean of categories 1 to 5. The higher the mean, the higher the level of education of the mother

**Table 8.21 Hunger risk classification as related to HH income and money spent on food in children aged 1 – 9 years nationally and by area of residence: South Africa 1999**

| Hunger risk classification   |                          | Area of Residence [Mean (sd)] |                      |                     |                      |                       |                       |                        |
|--|--------------------------|-------------------------------|----------------------|---------------------|----------------------|-----------------------|-----------------------|------------------------|
|  |                          | Com/rcial Farms               | Formal Urban         | Informal Urban      | Tribal               | Urban                 | Rural                 | RSA                    |
| <b>Total n</b><br>[food secure (n1); risk of hunger (n2); experience (n3)] |                          | 259<br>(60;76;123)            | 932<br>(374;217;341) | 243<br>(50; 43;150) | 929<br>(101;199;629) | 1175<br>(424;260;491) | 1188<br>(161;275;752) | 2363<br>(585;535;1243) |
| <b>Household income<sup>\$</sup></b>                                       | <b>Food secure</b>       | 3.2<br>(1.2)                  | 4.2**<br>(1.3) [a]   | 3.3**<br>(0.8) [a]  | 3.2**<br>(1.0) [a]   | 4.1**<br>(1.3) [a]    | 3.2**<br>(1.1) [a]    | 3.8**<br>(1.3) [a]     |
|  | <b>At risk of hunger</b> | 2.9<br>(0.8)                  | 3.4<br>(1.1) [b]     | 2.8<br>(1.1) [b]    | 2.8<br>(1.0) [b]     | 3.3<br>(1.1) [b]      | 2.8<br>(0.9) [b]      | 3.1<br>(1.1) [b]       |
|  | <b>Experience hunger</b> | 2.8<br>(0.9)                  | 2.7<br>(1.0) [c]     | 2.4<br>(0.9) [b]    | 2.4<br>(0.8) [c]     | 2.6<br>(1.0) [c]      | 2.5<br>(0.8) [c]      | 2.5<br>(0.9) [c]       |
| <b>Total n</b><br>[food secure (n1); risk of hunger (n2); experience (n3)] |                          | 238<br>(60;67;111)            | 872<br>(358;202;312) | 233<br>(51; 41;141) | 825<br>(81;186;558)  | 1105<br>(409;243;453) | 1063<br>(141;253;669) | 2168<br>(550;496;1122) |
| <b>Money spent on food<sup>&amp;</sup></b>                                 | <b>Food secure</b>       | 3.5**<br>(2.1) [a]            | 4.9**<br>(2.5) [a]   | 3.2*<br>(1.9)       | 2.9**<br>(2.1)       | 4.7**<br>(2.5) [a]    | 3.2**<br>(2.1) [a]    | 4.3**<br>(2.5) [a]     |
|  | <b>At risk of hunger</b> | 3.1<br>(2.0) [a][b]           | 3.8<br>(2.4) [b]     | 2.9<br>(1.8)        | 2.4<br>(1.9)         | 3.7<br>(2.3) [b]      | 2.6<br>(2.0) [b]      | 3.1<br>(2.2) [b]       |
|  | <b>Experience hunger</b> | 2.5<br>(1.6) [b]              | 2.9<br>(1.9) [c]     | 2.6<br>(1.9)        | 2.4<br>(2.1)         | 2.8<br>(1.9) [c]      | 2.4<br>(2.0) [b]      | 2.6<br>(2.0) [c]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$

[a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$

<sup>\$</sup>Household income (per month): 1 = None; 2 = R100-R500; 3 = R500-R1000; 4 = R1000-R3000; 5 = R3000-R5000; 6 = Over R5000. The mean and standard deviation presented in this table is the mean of categories 1 to 6. The higher the mean, the higher the monthly income

<sup>&</sup>Money spent on food (per week): 1 = R0-R50; 2 = R50-R100; 3 = R100-R150; 4 = R150-R200; 5 = R200-R250; 6 = R250-R300; 7 = R300-R350; 8 = R350-R400; 9 = Over R400. The mean and standard deviation presented in this table is the mean of categories 1 to 9. The higher the mean, the higher the amount of money spent on food

**Table 8.22 Hunger risk classification as related to HH income and money spent on food in children aged 1 – 9 years nationally and by province: South Africa 1999**

| Hunger risk classification  |                          | Province [Mean (sd)] |                    |                     |                      |                    |                   |                    |                     |                     |                        |
|---|--------------------------|----------------------|--------------------|---------------------|----------------------|--------------------|-------------------|--------------------|---------------------|---------------------|------------------------|
|   |                          | EC                   | FS                 | G/TENG              | KZN                  | M/GA               | NC                | NP                 | NW                  | WC                  | RSA                    |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 349<br>(15;43;291)   | 182<br>(88;24;70)  | 337<br>(125;73;139) | 445<br>(114;112;219) | 130<br>(25;34;71)  | 128<br>(17;32;79) | 267<br>(51;73;143) | 207<br>(25;51;131)  | 318<br>(125;93;100) | 2363<br>(585;535;1243) |
| <b>Household income<sup>\$</sup></b>                                    | <b>Food secure</b>       | 3.6**<br>(1.1) [a]   | 2.7**<br>(0.8) [a] | 3.9**<br>(1.4) [a]  | 3.7**<br>(1.1) [a]   | 4.2**<br>(1.1) [a] | 3.4<br>(1.1)      | 3.8**<br>(1.2) [a] | 3.0**<br>(0.7) [a]  | 4.8**<br>(1.1) [a]  | 3.8**<br>(1.3) [a]     |
|   | <b>At risk of hunger</b> | 2.8<br>(1.1) [b]     | 2.3<br>(0.6) [b]   | 3.1<br>(1.0) [b]    | 2.7<br>(0.9) [b]     | 3.4<br>(1.0) [b]   | 2.8<br>(1.1)      | 3.2<br>(1.2) [b]   | 2.8<br>(0.8) [a][b] | 3.8<br>(0.9) [b]    | 3.1<br>(1.1) [b]       |
|   | <b>Experience hunger</b> | 2.3<br>(0.8) [c]     | 2.2<br>(0.6) [b]   | 2.6<br>(1.0) [c]    | 2.4<br>(0.8) [c]     | 2.7<br>(1.0) [c]   | 2.9<br>(0.8)      | 2.7<br>(1.0) [c]   | 2.5<br>(0.7) [b]    | 3.1<br>(0.9) [c]    | 2.5<br>(0.9) [c]       |
| <b>Total n</b><br>[food secure (n); risk of hunger (n); experience (n)] |                          | 328<br>(14;43;271)   | 166<br>(83;21;62)  | 329<br>(125;72;132) | 416<br>(106;110;200) | 126<br>(26;36;64)  | 101<br>(15;25;61) | 222<br>(38;59;125) | 152<br>(14;36;102)  | 328<br>(129;94;105) | 2168<br>(550;496;1122) |
| <b>Money spent on food<sup>&amp;</sup></b>                              | <b>Food secure</b>       | 5.7*<br>(3.3) [a]    | 3.7**<br>(2.0) [a] | 4.2**<br>(2.4) [a]  | 3.8**<br>(2.1) [a]   | 4.0**<br>(2.1) [a] | 3.1<br>(2.8)      | 1.9<br>(1.5)       | 3.3<br>(2.7)        | 6.2**<br>(2.2) [a]  | 4.3**<br>(2.5) [a]     |
|   | <b>At risk of hunger</b> | 4.3<br>(2.9) [a][b]  | 2.4<br>(1.7) [b]   | 3.4<br>(2.3) [b]    | 2.5<br>(1.6) [b]     | 3.3<br>(2.4) [a]   | 2.9<br>(2.4)      | 1.8<br>(1.4)       | 2.6<br>(2.1)        | 4.4<br>(1.9) [b]    | 3.1<br>(2.2) [b]       |
|   | <b>Experience hunger</b> | 3.5<br>(2.6)[b]      | 2.5<br>(1.3) [b]   | 2.4<br>(1.5) [c]    | 1.9<br>(1.5) [c]     | 2.0<br>(1.6) [b]   | 2.7<br>(2.0)      | 1.6<br>(1.3)       | 2.3<br>(1.4)        | 3.3<br>(1.8) [c]    | 2.6<br>(2.0) [c]       |

\*Kruskal-Wallis test for three samples; significant for  $P < 0.05$ ; \*\*Kruskal-Wallis test for three samples, significant for  $P < 0.01$ ; [a]; [b] and [c]: different symbols indicate which means (comparing the three risk groups) are significantly different, Bonferroni multiple comparison test,  $p < 0.05$ ; <sup>\$</sup>Household income (per month): 1 = None; 2 = R100-R500; 3 = R500-R1000; 4 = R1000-R3000; 5 = R3000-R5000; 6 = Over R5000. The mean and standard deviation presented in this table is the mean of categories 1 to 6. The higher the mean, the higher the monthly income & Money spent on food (per week): 1 = R0-R50; 2 = R50-R100; 3 = R100-R150; 4 = R150-R200; 5 = R200-R250; 6 = R250-R300; 7 = R300-R350; 8 = R350-R400; 9 = Over R400. The mean and standard deviation presented in this table is the mean of categories 1 to 9. The higher the mean, the higher the amount of money spent on food