**Supplemental Table 1: Blood parameters at baseline, 3 and 6 months\***

|  |  |  |  |
| --- | --- | --- | --- |
|  | Skimmed milk powder group (n=38) | Leaf concentrate powder group (n=35) | Between-group difference† |
| CD4+ T lymphocytes (cells/mm3) |
| Baseline (n=37, 35) | 780 (690, 882) | 748 (664, 844) | 0.96 (0.81, 1.14) |
| 3 months (n=38, 33) | 769 (682, 868) | 822 (735, 919) | 1.07 (0.91, 1.26) |
| 6 months (n=38, 34) | 716 (624, 822) | 701 (624, 787) | 0.98 (0.82, 1.17) |
| 0-6 month change | 0.96 (0.93, 1.00) | 0.97 (0.94, 1.00) | 1.01 (0.96, 1.05) |
| Adjusted 0-6 month change‡ | 0.98 (0.94, 1.01) | 0.97 (0.93, 1.00) | 0.99 (0.95, 1.03) |
|  |  |  |  |
| WBC (103/µL)‡ |
| Baseline (n=38, 35) | 5.36 (4.68, 6.15) | 4.66 (4.23, 5.13) | 0.94 (0.87, 1.01) |
| 3 months (n=38, 35) | 5.12 (4.65, 5.64) | 5.33 (4.79, 5.94) | 1.02 (0.96, 1.08) |
| 6 months (n=38, 35) | 4.89 (4.39, 5.44) | 4.69 (4.19, 5.25) | 0.98 (0.92, 1.05) |
| 0-6 month change | 0.97 (0.91, 1.04) | 1.00 (0.96, 1.04) | 1.04 (0.97, 1.11) |
| Adjusted 0-6 month change‡ | 1.00 (0.97, 1.02) | 1.02 (0.99, 1.06) | 1.03 (0.98, 1.07) |
|  |  |  |  |
| Lymphocytes (103/µL)‡ |
| Baseline (n=38, 35) | 2.72 (2.36, 3.13) | 2.26 (2.05, 2.50) | 0.92 (0.86, 1.00) |
| 3 months (n=38, 35) | 2.60 (2.37, 2.86) | 2.51 (2.26, 2.79) | 0.98 (0.93, 1.05) |
| 6 months (n=38, 35) | 2.49 (2.28, 2.73) | 2.21 (1.99, 2.44) | 0.95 (0.89, 1.01) |
| 0-6 month change | 0.97 (0.92, 1.02) | 0.99 (0.96, 1.03) | 1.02 (0.96, 1.09) |
| Adjusted 0-6 month change‡ | 1.00 (0.97, 1.02) | 1.00 (0.96, 1.03) | 1.00 (0.96, 1.04) |
|  |  |  |  |
| Platelets (103/µL)‡ |
| Baseline (n=38, 35) | 266 (243, 291) | 241 (203, 285) | 0.96 (0.88, 1.04) |
| 3 months (n=38, 35) | 270 (244, 298) | 255 (231, 281) | 0.98 (0.92, 1.04) |
| 6 months (n=38, 35) | 291 (267, 317) | 247 (208, 293) | 0.93 (0.86, 1.01) |
| 0-6 month change | 1.04 (1.01, 1.08) | 1.02 (0.97, 1.08) | 0.98 (0.92, 1.05) |
| Adjusted 0-6 month change‡ | 1.02 (0.97, 1.07) | 0.99 (0.94, 1.05) | 0.97 (0.91, 1.03) |

\* Values shown for baseline, 3- and 6-month levels of each blood parameter are geometric mean (95% CI). Between-group difference and 0-6 month changes are ratios of geometric means from linear regression of log-transformed blood parameter values, e.g. coefficient = 1.10 indicates that levels are 10% higher in LCP group compared with SMP group, coefficient = 0.90 indicates that levels are 10% lower in LCP group compared with SMP group, coefficient = 1.00 indicates no difference/change.

† The between-group difference corresponding to the “0-6 month change” shows the estimated additional effect of leaf concentrate powder compared with milk powder

‡ Adjusted for age, sex, all blood parameters, CRP positivity, and height-for-age Z-score

**Supplemental Table 2: Anemia, inflammation, fatigue, appetite and overall health at baseline, 3 and 6 months**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Skimmed milk powder | Leaf concentrate powder | P-value**\*** |
| Anemia (Hb<115g/L) | Baseline |  | 14 (36.8%) | 15 (42.9%) | 0.64 |
| 3 months |  | 10 (26.3%) | 8 (22.9%) | 0.79 |
| 6 months |  | 7 (18.4%) | 8 (22.9%) | 0.77 |
| CRP positive (≥6mg/L) | Baseline |  | 8 (21.1%) | 9 (25.7%) | 0.78 |
| 3 months |  | 6 (15.8%) | 5 (14.3%) | 1.00 |
| 6 months |  | 5 (13.2%) | 2 (5.7%) | 0.43 |
| Fatigue | Baseline | None | 25 (65.8%) | 28 (80.0%) | 0.20 |
|  | Moderate | 13 (34.2%) | 7 (20.0%) |  |
|  | Severe | 0 (0.0%) | 0 (0.0%) |  |
| 3 months | None | 29 (76.3%) | 29 (82.9%) | 0.88 |
|  | Moderate | 8 (21.1%) | 6 (17.1%) |  |
|  | Severe | 1 (2.6%) | 0 (0.0%) |  |
| 6 months | None | 35 (92.1%) | 35 (100.0%) | 0.24 |
|  | Moderate | 3 (7.9%) | 0 (0.0%) |  |
|  | Severe | 0 (0.0%) | 0 (0.0%) |  |
| Appetite | Baseline | Poor | 0 (0.0%) | 0 (0.0%) | 0.64 |
|  | Satisfactory | 9 (23.7%) | 6 (17.1%) |  |
|  | Good | 25 (65.8%) | 27 (77.1%) |  |
|  | Very good | 4 (10.5%) | 2 (5.7%) |  |
| 3 months | Poor | 1 (2.6%) | 0 (0.0%) | 0.95 |
|  | Satisfactory | 2 (5.3%) | 1 (2.9%) |  |
|  | Good | 6 (15.8%) | 7 (20.0%) |  |
|  | Very good | 29 (76.3%) | 27 (77.1%) |  |
| 6 months | Poor | 1 (2.6%) | 0 (0.0%) | <0.001 |
|  | Satisfactory | 2 (5.3%) | 1 (2.9%) |  |
|  | Good | 25 (65.8%) | 5 (14.3%) |  |
|  | Very good | 10 (26.3%) | 29 (82.9%) |  |
| Overall health | Baseline | Very poor | 0 (0.0%) | 0 (0.0%) | 0.56 |
|  | Poor | 0 (0.0%) | 0 (0.0%) |  |
|  | Satisfactory | 6 (15.8%) | 8 (22.9%) |  |
|  | Good | 31 (81.6%) | 27 (77.1%) |  |
|  | Excellent | 1 (2.6%) | 0 (0.0%) |  |
| 3 months | Very poor | 0 (0.0%) | 0 (0.0%) | 0.73 |
|  | Poor | 2 (5.3%) | 0 (0.0%) |  |
|  | Satisfactory | 3 (7.9%) | 3 (8.6%) |  |
|  | Good | 12 (31.6%) | 11 (31.4%) |  |
|  | Excellent | 21 (55.3%) | 21 (60.0%) |  |
| 6 months | Very poor | 0 (0.0%) | 0 (0.0%) | 0.007 |
|  | Poor | 1 (2.6%) | 0 (0.0%) |  |
|  | Satisfactory | 9 (23.7%) | 5 (14.3%) |  |
|  | Good | 27 (71.1%) | 20 (57.1%) |  |
|  | Excellent | 1 (2.6%) | 10 (28.6%) |  |

\* Fisher’s exact test

**Supplemental Table 3: Palatability of supplements at 3 and 6 months**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | Skimmed milk powder | Leaf concentrate powder | P-value**\*** |
|  |  |  |  |  |  |
| Appearance | 3 months | Unappealing | 0 (0.0%) | 4 (11.4%) | 0.03 |
|  | Acceptable | 0 (0.0%) | 3 (8.6%) |  |
|  | Appealing | 12 (31.6%) | 9 (25.7%) |  |
|  | Very appealing | 26 (68.4%) | 19 (54.3%) |  |
| 6 months | Unappealing | 0 (0.0%) | 0 (0.0%) | 0.02 |
|  | Acceptable | 0 (0.0%) | 5 (14.3%) |  |
|  | Appealing | 35 (92.1%) | 29 (82.9%) |  |
|  | Very appealing | 3 (7.9%) | 1 (2.9%) |  |
|  |  |  |  |  |
| Texture | 3 months | Unappealing | 0 (0.0%) | 2 (5.7%) | 0.02 |
|  | Acceptable | 0 (0.0%) | 4 (11.4%) |  |
|  | Appealing | 9 (23.7%) | 11 (31.4%) |  |
|  | Very appealing | 29 (76.3%) | 18 (51.4%) |  |
| 6 months | Unappealing | 0 (0.0%) | 1 (2.9%) | 0.27 |
|  | Acceptable | 3 (7.9%) | 6 (17.1%) |  |
|  | Appealing | 31 (81.6%) | 27 (77.1%) |  |
|  | Very appealing | 4 (10.5%) | 1 (2.9%) |  |
|  |  |  |  |  |
| Taste | 3 months | Very bad | 0 (0.0%) | 0 (0.0%) | <0.001 |
|  | Bad | 0 (0.0%) | 6 (17.1%) |  |
|  | Acceptable | 1 (2.6%) | 2 (5.7%) |  |
|  | Good | 7 (18.4%) | 14 (40.0%) |  |
|  | Very good | 30 (79.0%) | 13 (37.1%) |  |
| 6 months | Very bad | 0 (0.0%) | 0 (0.0%) | 0.002 |
|  | Bad | 0 (0.0%) | 4 (11.4%) |  |
|  | Acceptable | 1 (2.7%) | 7 (20.0%) |  |
|  | Good | 29 (78.4%) | 23 (65.7%) |  |
|  | Very good | 7 (18.9%) | 1 (2.9%) |  |

\* Fisher’s exact test