



Supplemental figure 1: Study flow diagram indicating the number of infants initially enrolled and how the ultimate analytic sample was arrived at.

Supplemental table 1: Models considered for latent class trajectories.

| Model specification | Classes | Link function | Loglink | BIC | % class 1 | % class 2 | % class 3 | % class 4 | % class 5 | % class 6 | % class 7 |
|----------------------------|----------|---------------------------|--------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| LAZ models | | | | | | | | | | | |
| Age+age ² | 5 | Spline | -1702 | 3540 | 8 | 13 | 31 | 33 | 16 | | |
| Age+age ² | 7 | Spline | -1681 | 3543 | 8 | 13 | 24 | 17 | 9 | 16 | 14 |
| Age+age ² | 6 | Spline | -1692 | 3544 | 8 | 13 | 26 | 13 | 29 | 12 | |
| Age+age² | 4 | Spline¹ | -1728 | 3571 | 10 | 42 | 32 | 16 | | | |
| Age+age ² | 7 | Linear | -1719 | 3592 | 3 | 7 | 30 | 39 | 4 | 14 | 3 |
| Age+age ² | 6 | Spline | -1733 | 3597 | 6 | 13 | 15 | 32 | 31 | 3 | |
| Age | 5 | Spline | -1746 | 3602 | 8 | 13 | 32 | 32 | 16 | | |
| Age | 6 | Spline | -1739 | 3604 | 7 | 12 | 28 | 25 | 17 | 12 | |
| Age | 7 | Spline | -1734 | 3611 | 6 | 12 | 26 | 8 | 24 | 13 | 12 |
| Age | 4 | Spline | -1766 | 3624 | 10 | 43 | 32 | 16 | | | |
| Age+age ² | 3 | Spline | -1766 | 3625 | 46 | 38 | 16 | | | | |
| Age+age ² | 5 | Linear | -1773 | 3655 | 13 | 5 | 38 | 30 | 13 | | |
| Age+age ² | 4 | Linear | -1787 | 3661 | 9 | 47 | 31 | 13 | | | |
| Age | 3 | Spline | -1801 | 3679 | 46 | 37 | 17 | | | | |
| Age+age ² | 3 | Linear | -1822 | 3710 | 47 | 38 | 15 | | | | |
| Age+age ² | 2 | Spline | -1854 | 3780 | 59 | 41 | | | | | |
| Age | 2 | Spline | -1881 | 3822 | 59 | 41 | | | | | |
| Age+age ² | 2 | Linear | -1914 | 3871 | 67 | 33 | | | | | |

WLZ models

| | | | | | | | | | | | |
|----------------------------|----------|---------------|--------------|-------------|-----------|-----------|-----------|-----------|----|----|----|
| Age+age ² | 5 | Linear | -1964 | 4038 | 3 | 17 | 29 | 37 | 16 | | |
| Age+age ² | 5 | Spline | -1952 | 4040 | 3 | 20 | 28 | 32 | 17 | | |
| Age+age ² | 7 | Linear | -1948 | 4050 | 3 | 11 | 25 | 37 | 8 | 11 | 6 |
| Age+age ² | 7 | Spline | -1935 | 4052 | 3 | 19 | 16 | 11 | 11 | 31 | 10 |
| Age+age² | 4 | Spline | -1973 | 4061 | 26 | 22 | 32 | 19 | | | |
| Age+age ² | 6 | Linear | -1966 | 4064 | 3 | 17 | 29 | 16 | 36 | 0 | |
| Age+age ² | 6 | Spline | -1954 | 4066 | 17 | 15 | 24 | 14 | 8 | 22 | |
| Age | 5 | Spline | -1980 | 4069 | 3 | 30 | 17 | 35 | 16 | | |
| Age | 6 | Spline | -1975 | 4076 | 2 | 26 | 36 | 16 | 11 | 9 | |
| Age | 7 | Spline | -1970 | 4082 | 2 | 6 | 21 | 18 | 36 | 10 | 7 |
| Age+age ² | 4 | Linear | -1998 | 4084 | 21 | 15 | 45 | 19 | | | |
| Age | 4 | Spline | -1997 | 4086 | 24 | 17 | 43 | 16 | | | |
| Age+age ² | 3 | Spline | -1999 | 4090 | 27 | 52 | 21 | | | | |
| Age | 3 | Spline | -2012 | 4100 | 24 | 54 | 22 | | | | |
| Age+age ² | 3 | Linear | -2020 | 4106 | 21 | 57 | 22 | | | | |
| Age+age ² | 2 | Spline | -2030 | 4131 | 42 | 58 | | | | | |
| Age | 2 | Spline | -2041 | 4141 | 45 | 55 | | | | | |
| Age+age ² | 2 | Linear | -2052 | 4148 | 37 | 63 | | | | | |

| Sum of skin folds | | | | | | | | | | | |
|----------------------|---|--------|-------|------|----|----|----|----|----|----|---|
| Age+age ² | 3 | Spline | -4236 | 8566 | 11 | 51 | 38 | | | | |
| Age+age ² | 4 | Spline | -4229 | 8572 | 2 | 48 | 19 | 30 | | | |
| Age+age ² | 2 | Spline | -4261 | 8592 | 35 | 65 | | | | | |
| Age+age ² | 5 | Spline | -4228 | 8593 | 2 | 49 | 19 | 25 | 5 | | |
| Age+age ² | 6 | Spline | -4226 | 8610 | 2 | 50 | 12 | 29 | 2 | 7 | |
| Age+age ² | 3 | Linear | -4276 | 8618 | 55 | 35 | 9 | | | | |
| Age+age ² | 4 | Linear | -4271 | 8629 | 15 | 55 | 27 | 3 | | | |
| Age+age ² | 7 | Spline | -4229 | 8638 | 2 | 50 | 18 | 29 | 0 | 2 | 0 |
| Age+age ² | 2 | Linear | -4300 | 8644 | 70 | 30 | | | | | |
| Age+age ² | 5 | Linear | -4269 | 8647 | 8 | 3 | 52 | 12 | 25 | | |
| Age+age ² | 6 | Linear | -4267 | 8665 | 1 | 57 | 14 | 24 | 1 | 2 | |
| Age+age ² | 7 | Linear | -4266 | 8684 | 6 | 1 | 56 | 1 | 21 | 10 | 3 |
| Age | 2 | Spline | -4456 | 8973 | 34 | 66 | | | | | |
| Age | 3 | Spline | -4450 | 8977 | 10 | 51 | 39 | | | | |
| Age | 4 | Spline | -4450 | 8994 | 10 | 58 | 0 | 32 | | | |
| Age | 5 | Spline | -4444 | 8997 | 9 | 9 | 51 | 32 | 0 | | |
| Age | 6 | Spline | -4444 | 9013 | 7 | 9 | 7 | 49 | 27 | 0 | |
| Age | 7 | Spline | -4444 | 9030 | 11 | 0 | 7 | 10 | 38 | 35 | 0 |

Log AFA

| | | | | | | | | | | | |
|----------------------|----------|--------|-----------------|----------------|--------------|--------------|--------------|--------|--------|--------|-------|
| Age+age ² | 6 | Spline | 1507.518 | -2856.8 | 2.564 | 34.19 | 36.75 | 16.667 | 7.265 | 2.5641 | |
| Age+age ² | 3 | Spline | 1469.557 | -2846.4 | 47.01 | 43.59 | 9.402 | | | | |
| Age+age ² | 4 | Spline | 1477.749 | -2840.9 | 46.15 | 44.02 | 7.265 | 2.5641 | | | |
| Age+age ² | 7 | Spline | 1507.507 | -2835 | 0 | 36.75 | 2.564 | 7.265 | 16.667 | 34.188 | 2.564 |
| Age+age ² | 5 | Spline | 1483.038 | -2829.7 | 38.03 | 35.04 | 18.38 | 8.547 | 0 | | |
| Age+age ² | 2 | Spline | 1419.896 | -2768.9 | 53.42 | 46.58 | | | | | |
| Age+age ² | 5 | Linear | 1354.355 | -2599.6 | 0.427 | 55.13 | 6.838 | 35.043 | 2.5641 | | |
| Age+age ² | 6 | Linear | 1363.166 | -2595.4 | 4.701 | 0.427 | 3.846 | 55.128 | 33.333 | 2.5641 | |
| Age+age ² | 7 | Linear | 1367.824 | -2582.9 | 0.427 | 14.53 | 16.67 | 19.231 | 3.8462 | 42.735 | 2.564 |
| Age+age ² | 4 | Linear | 1323.569 | -2559.9 | 6.838 | 35.04 | 55.56 | 2.5641 | | | |
| Age+age ² | 3 | Linear | 1307.954 | -2550.4 | 47.86 | 49.15 | 2.991 | | | | |
| Age+age ² | 2 | Linear | 1282.534 | -2521.4 | 53.85 | 46.15 | | | | | |
| Age | 4 | Spline | 1258.122 | -2423.5 | 6.838 | 5.556 | 39.74 | 47.863 | | | |
| Age | 5 | Spline | 1262.107 | -2415.1 | 3.419 | 6.41 | 11.97 | 35.47 | 42.735 | | |
| Age | 6 | Spline | 1263.574 | -2401.7 | 3.419 | 5.556 | 2.991 | 11.966 | 35.47 | 40.598 | |
| Age | 3 | Spline | 1238.276 | -2400.2 | 43.16 | 6.838 | 50 | | | | |
| Age | 7 | Spline | 1265.968 | -2390.1 | 2.137 | 3.419 | 2.991 | 1.7094 | 13.675 | 35.47 | 40.6 |
| Age | 2 | Spline | 1211.993 | -2364 | 42.31 | 57.69 | | | | | |

| Log MUAC | | | | | | | | | | | |
|----------------------------|----------|---------------|-------------|--------------|-----------|-----------|-----------|----|----|----|----|
| Age+age ² | 4 | Spline | 3903 | -7691 | 39 | 6 | 16 | 38 | | | |
| Age+age² | 3 | Spline | 3887 | -7680 | 38 | 50 | 12 | | | | |
| Age+age ² | 5 | Spline | 3906 | -7675 | 39 | 6 | 39 | 16 | 0 | | |
| Age+age ² | 6 | Spline | 3908 | -7657 | 0 | 39 | 5 | 38 | 15 | 3 | |
| Age+age ² | 2 | Spline | 3846 | -7620 | 50 | 50 | | | | | |
| Age+age ² | 7 | Spline | 3889 | -7598 | 0 | 0 | 50 | 12 | 37 | 0 | 0 |
| Age | 3 | Spline | 3592 | -7108 | 8 | 52 | 40 | | | | |
| Age | 4 | Spline | 3594 | -7095 | 5 | 41 | 30 | 25 | | | |
| Age | 2 | Spline | 3576 | -7092 | 49 | 51 | | | | | |
| Age | 5 | Spline | 3594 | -7079 | 4 | 18 | 34 | 27 | 17 | | |
| Age | 6 | Spline | 3594 | -7062 | 4 | 18 | 40 | 0 | 14 | 24 | |
| Age | 7 | Spline | 3594 | -7046 | 4 | 16 | 42 | 20 | 0 | 0 | 18 |
| Age+age ² | 2 | Linear | 1000000000 | ##### | 100 | 0 | | | | | |
| Age+age ² | 3 | Linear | 1000000000 | ##### | 100 | 0 | 0 | | | | |
| Age+age ² | 4 | Linear | 1000000000 | ##### | 100 | 0 | 0 | 0 | | | |
| Age+age ² | 5 | Linear | 1000000000 | ##### | 100 | 0 | 0 | 0 | 0 | | |
| Age+age ² | 6 | Linear | 1000000000 | ##### | 100 | 0 | 0 | 0 | 0 | 0 | |
| Age+age ² | 7 | Linear | 1000000000 | ##### | 100 | 0 | 0 | 0 | 0 | 0 | 0 |

1. Bold reflects p-value < 0.05

Supplemental table 2: Counts of infants in each class with the percentage who are HEU (n=234)

| | | | WLZ classes | | | | MUAC classes | | | Skinfold classes ¹ | | | AFA classes ¹ | | | |
|-------|------------|-------------|----------------------|------------|-----|-----|--------------|-------|-----|-------------------------------|--------|-----|--------------------------|--------|------|----|
| | | | High | Rapid fall | Mid | Low | High | Mid | Low | High | Mid | Low | High | Mid | Low | |
| Class | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | |
| LAZ | Tallest | 1 | Count | 8 | 2 | 8 | 5 | 7 | 10 | 6 | 6 | 10 | 7 | 7 | 9 | 7 |
| | | Percent HEU | 25% | 0% | 25% | 0% | 29% | 20% | 0% | 33% | 10% | 14% | 0% | 22% | 29% | |
| | Tall-mid | 2 | Count | 23 | 21 | 40 | 17 | 8 | 61 | 32 | 7 | 62 | 30 | 36 | 54 | 9 |
| | | Percent HEU | 35% | 19% | 35% | 29% | 25% | 31% | 31% | 43% | 23% | 47% | 28% | 33% | 33% | |
| | Short-mid | 3 | Count | 20 | 18 | 20 | 19 | 5 | 32 | 40 | 11 | 32 | 33 | 43 | 28 | 5 |
| | | Percent HEU | 45% | 44% | 45% | 26% | 20% | 50% | 35% | 45% | 28% | 52% | 37% | 50% | 20% | |
| | Shortest | 4 | Count | 11 | 12 | 8 | 6 | 1 | 11 | 25 | 1 | 16 | 19 | 24 | 11 | 1 |
| | | Percent HEU | 55% | 67% | 50% | 33% | 100% | 64% | 48% | 100% | 69% | 37% | 46% | 64% | 100% | |
| | | | P-value ² | 0.405 | | | | 0.487 | | | 0.007 | | | <0.001 | | |
| WLZ | High | 1 | Count | | | | | 17 | 39 | 6 | 21 | 35 | 6 | 8 | 37 | 17 |
| | | Percent HEU | | | | | 29% | 46% | 33% | 43% | 37% | 50% | 38% | 46% | 29% | |
| | Rapid fall | 2 | Count | | | | | 0 | 17 | 36 | 1 | 21 | 31 | 40 | 13 | 0 |
| | | Percent HEU | | | | | -- | 29% | 42% | 0% | 33% | 42% | 38% | 38% | -- | |
| | Mid | 3 | Count | | | | | 4 | 51 | 21 | 3 | 50 | 21 | 20 | 49 | 5 |
| | | Percent HEU | | | | | 25% | 39% | 38% | 67% | 28% | 57% | 35% | 39% | 40% | |
| | Low | 4 | Count | | | | | 0 | 7 | 40 | 0 | 14 | 31 | 42 | 3 | 0 |
| | | Percent HEU | | | | | -- | 14% | 28% | -- | 7% | 35% | 29% | 0% | -- | |
| | | | p-value | | | | | 0.766 | | | <0.001 | | | <0.001 | | |

| | | | | | | | | | |
|----------|------|---|-------------|-------|-----|-----|------------------|-----|-----|
| MUAC | High | 1 | Count | 9 | 80 | 22 | 8 | 102 | 1 |
| | | | Percent HEU | | | | | | |
| | Mid | 2 | Count | 2 | 33 | 67 | 102 | 0 | 0 |
| | | | Percent HEU | 0% | 24% | 40% | 34% | -- | -- |
| | Low | 3 | Count | 14 | 7 | 0 | 0 | 0 | 21 |
| | | | Percent HEU | 36% | 14% | -- | -- | -- | 29% |
| | | | p-value | 0.708 | | | 0.364 | | |
| Skinfold | High | 1 | Count | | | | 2 | 9 | 14 |
| | | | Percent HEU | | | | 0% | 67% | 36% |
| | Mid | 2 | Count | | | | 37 | 75 | 8 |
| | | | Percent HEU | | | | 24% | 32% | 25% |
| | Low | 3 | Count | | | | 71 | 18 | 0 |
| | | | Percent HEU | | | | 39% | 61% | -- |
| | | | p-value | | | | <0.001 | | |

1. n=234

2. P-value for ANOVA testing a different N by group

Supplemental table 3: Odds of WLZ-class membership are not related to baseline characteristics (n=232)

| N = 232 | Class 1 | | Class 2 | | Class 3 | | Class 4 | |
|--|---------|------------|------------|------------|---------|--------|---------|------------|
| | OR | 95% CI | OR | 95% CI | OR | 95% CI | OR | 95% CI |
| | High | | Rapid fall | | Middle | | Low | |
| <i>Univariate analysis considering exposure status alone</i> | 1.095 | 0.55, 2.16 | 0.982 | 0.48, 2.01 | REF | | 0.556 | 0.25, 1.23 |
| <i>Multivariate analysis</i> | | | | | | | | |
| Maternal HIV | 1.855 | 0.58, 5.93 | 1.336 | 0.39, 4.57 | REF | | 0.865 | 0.20, 3.78 |
| Food insecurity score | 1.004 | 0.90, 1.13 | 0.991 | 0.89, 1.12 | REF | | 1.095 | 0.97, 1.23 |
| FS*Maternal HIV | 0.933 | 0.80, 1.09 | 0.937 | 0.80, 1.11 | REF | | 0.903 | 0.76, 1.07 |
| Mother completed more than primary school | 1.049 | 0.50, 2.23 | 0.695 | 0.32, 1.54 | REF | | 1.489 | 0.65, 3.42 |
| Maternal height | 1.013 | 0.96, 1.07 | 1.018 | 0.96, 1.08 | REF | | 1.055 | 0.99, 1.13 |
| Female infant | 1.076 | 0.53, 2.18 | 1.381 | 0.66, 2.89 | REF | | 0.811 | 0.37, 1.79 |
| Maternal age | 0.970 | 0.90, 1.04 | 1.012 | 0.94, 1.09 | REF | | 0.972 | 0.90, 1.05 |
| Previous maternal displacement | 1.531 | 0.67, 3.53 | 2.196 | 0.88, 5.53 | REF | | 0.949 | 0.39, 2.34 |
| Homemaker | 1.189 | 0.55, 2.61 | 1.664 | 0.73, 3.78 | REF | | 1.754 | 0.73, 4.22 |
| Asset index | 1.098 | 0.88, 1.38 | 1.068 | 0.83, 1.38 | REF | | 0.776 | 0.57, 1.07 |
| Gestational age | 1.032 | 0.89, 1.21 | 0.899 | 0.77, 1.05 | REF | | 0.993 | 0.84, 1.17 |
| EBF to 3 months | 1.075 | 0.52, 2.23 | 1.773 | 0.83, 3.82 | REF | | 1.239 | 0.56, 2.75 |
| Born in the hungry season | 0.765 | 0.36, 1.65 | 1.571 | 0.73, 3.39 | REF | | 0.535 | 0.22, 1.30 |

| <i>Descriptives</i> | Mean / N | SD / % ¹ | Mean / N | SD / % | Mean / N | SD / % | Mean / N | SD / % |
|---|----------|---------------------|----------|--------|----------|--------|----------|--------|
| N = 238 ³ | 62 | | 53 | | 76 | | 47 | |
| Maternal HIV | 25 | 40% | 20 | 38% | 29 | 38% | 12 | 26% |
| Maternal height | 162.370 | 5.777 | 162.588 | 5.593 | 162.324 | 6.467 | 163.316 | 6.094 |
| Mother completed more than primary school | 30 | 48% | 20 | 38% | 37 | 49% | 24 | 51% |
| Food insecurity score | 5.323 | 4.273 | 5.302 | 5.195 | 5.816 | 4.604 | 6.851 | 4.672 |
| Female infant | 28 | 45% | 27 | 51% | 33 | 43% | 20 | 43% |
| Maternal age | 24.898 | 5.511 | 25.786 | 5.503 | 25.655 | 5.320 | 24.285 | 5.296 |
| Previous maternal displacement | 48 | 77% | 44 | 83% | 54 | 71% | 33 | 70% |
| Homemaker | 29 | 47% | 26 | 49% | 32 | 42% | 24 | 51% |
| Asset index | 0.327 | 1.687 | 0.064 | 1.452 | 0.061 | 1.688 | -0.405 | 1.266 |
| Gestational age | 39.592 | 2.403 | 38.987 | 2.633 | 39.402 | 2.109 | 39.280 | 2.284 |
| EBF to 3 months | 28 | 45% | 30 | 57% | 35 | 46% | 23 | 49% |
| Born in the hungry season | 19 | 31% | 23 | 43% | 28 | 37% | 13 | 28% |

1. Percentages are calculated within classes, not between. I.e 48% of kids in class 1 have mothers who completed more than primary school

Supplemental table 4: Infants whose mothers completed primary school and male infants tended to be in the class with the lowest MUAC.

| | Class 1 | | Class 2 | | Class 3 | |
|--|--------------|-------------------|---------|--------|--------------------------|--------------------|
| | OR | 95% CI | OR | 95% CI | OR | 95% CI |
| N = 232 | High | | Mid | Low | | |
| <i>Univariate analysis considering exposure status alone</i> | 1.170 | 0.68, 2.03 | REF | | 0.744 | 0.27, 2.08 |
| <i>Multivariate analysis</i> | | | | | | |
| Maternal HIV | 1.575 | 0.58, 4.26 | REF | | 1.143 | 0.17, 7.69 |
| Food insecurity score | 1.011 | 0.92, 1.12 | REF | | 1.117 | 0.95, 1.32 |
| FS*Maternal HIV | 1.014 | 0.90, 1.15 | REF | | 0.975 | 0.79, 1.21 |
| Mother completed more than primary school | 1.024 | 0.55, 1.92 | REF | | 3.333¹ | 1.03, 10.80 |
| Maternal height | 1.016 | 0.97, 1.07 | REF | | 1.012 | 0.93, 1.11 |
| Female infant | 0.641 | 0.36, 1.15 | REF | | 0.294 | 0.10, 0.89 |
| Maternal age | 0.941 | 0.89, 1.00 | REF | | 1.021 | 0.92, 1.14 |
| Previous maternal displacement | 1.111 | 0.55, 2.25 | REF | | 0.819 | 0.26, 2.64 |
| Homemaker | 0.513 | 0.26, 1.00 | REF | | 1.133 | 0.36, 3.60 |
| Asset index | 1.335 | 1.06, 1.67 | REF | | 1.303 | 0.92, 1.86 |
| Gestational age | 1.149 | 1.01, 1.31 | REF | | 1.082 | 0.87, 1.35 |
| EBF to 3 months | 0.838 | 0.46, 1.52 | REF | | 0.466 | 0.16, 1.35 |
| Born in the hungry season | 2.489 | 1.32, 4.66 | REF | | 0.899 | 0.28, 2.97 |

| <i>Descriptives</i> | Mean / N | SD / % | Mean / N | SD / % | Mean / N | SD / % ² |
|---|---------------|--------------|-------------|-----------|-------------|---------------------|
| N = 238 ³ | | 21 | | 114 | | 103 |
| Maternal HIV | 6 | 29% | 44 | 39% | 36 | 35% |
| Food insecurity score | 6.762 | 4.847 | 5.421 | 4.232 | 5.971 | 5.104 |
| Mother completed more than primary school | 14 | 67% | 54 | 0.474 | 43 | 42% |
| Maternal height | 162.576 | 6.335 | 162.926 | 5.886 | 162.222 | 6.101 |
| Female infant | 6 | 29% | 48 | 42% | 54 | 0.524 |
| Maternal age | 25.401 | 5.677 | 24.803 | 5.140 | 25.636 | 5.646 |
| Previous maternal displacement | 15 | 71% | 85 | 75% | 79 | 77% |
| Homemaker | 11 | 52% | 48 | 42% | 52 | 50% |
| Asset index | 0.281 | 1.432 | 0.262 | 1.686 | -0.258 | 1.424 |
| Gestational age | 39.635 | 2.121 | 38.969 | 2.552 | 39.497 | 2.236 |
| EBF to 3 months | 53 | 46% | 56 | 54% | 7 | 33% |
| Born in the hungry season | 6 | 29% | 50 | 44% | 27 | 26% |

1. Bold reflect p-value < 0.05

2. Percentages are calculated within classes, not between, i.e. 47% of kids in class 1 have mothers who completed more than primary school

3. Additional six infants were dropped from the multinomial logistic regression due to missing values regarding breastfeeding status

Supplemental table 5: Male infants and infants whose mothers completed primary school have higher odds of being in the lowest AFA-class.

| | Class 1 | | Class 2 | | Class 3 | |
|--|---------|--------|--------------|-------------------|--------------|--------------------|
| | OR | 95% CI | OR | 95% CI | OR | 95% CI |
| N = 230 | High | | Mid | | Low | |
| <i>Univariate analysis considering exposure status alone</i> | REF | | 1.326 | 0.76, 2.32 | 0.921 | 0.35, 2.44 |
| <i>Multivariate analysis</i> | REF | | | | | |
| Maternal HIV | REF | | 1.584 | 0.59, 4.26 | 1.530 | 0.25, 9.21 |
| Food insecurity score | REF | | 1.021 | 0.93, 1.12 | 1.126 | 0.96, 1.32 |
| FS*Maternal HIV | REF | | 1.016 | 0.90, 1.15 | 0.962 | 0.79, 1.19 |
| Mother completed more than primary school | REF | | 1.114 | 0.59, 2.08 | 3.679 | 1.16, 11.58 |
| Maternal height | REF | | 1.000 | 0.95, 1.04 | 1.012 | 0.93, 1.11 |
| Female infant | REF | | 0.617 | 0.34, 1.11 | 0.274 | 0.09, 0.81 |
| Maternal age | REF | | 0.965 | 0.91, 1.02 | 1.028 | 0.93, 1.14 |
| Previous maternal displacement | REF | | 1.319 | 0.65, 2.69 | 0.746 | 0.24, 2.29 |
| Homemaker | REF | | 0.522 | 0.27, 1.01 | 1.062 | 0.35, 3.25 |
| Asset index | REF | | 1.370 | 1.09, 1.70 | 1.304 | 0.93, 1.82 |
| Gestational age | REF | | 1.104 | 0.97, 1.25 | 1.036 | 0.84, 1.27 |
| EBF to 3 months | REF | | 1.011 | 0.55, 1.84 | 0.580 | 0.21, 1.62 |
| Born in the hungry season | REF | | 2.346 | 1.25, 4.39 | 0.823 | 0.25, 2.66 |

| <i>Descriptives</i> | Mean / N | SD / % | Mean / N | SD / % | Mean / N | SD / % ² |
|---|-------------|-----------|-------------|------------|-------------|---------------------|
| N = 234 ³ | 110 | | 102 | | 22 | |
| Maternal HIV | 37 | 34% | 41 | 40% | 7 | 32% |
| Food insecurity score | 5.7 | 5.0 | 5.5 | 4.2 | 6.6 | 4.8 |
| Mother completed more than primary school | 46 | 42% | 49 | 48% | 15 | 68% |
| Maternal height | 162 | 6 | 163 | 6 | 163 | 6 |
| Female infant | 58 | 53% | 42 | 41% | 6 | 27% |
| Maternal age | 25 | 6 | 25 | 5 | 25 | 6 |
| Previous maternal displacement | 84 | 76% | 79 | 77% | 15 | 68% |
| Homemaker | 56 | 51% | 42 | 41% | 11 | 50% |
| Asset index | -0.2 | 1.4 | 0.3 | 1.7 | 0.3 | 1.4 |
| Gestational age | 39.1 | 2.5 | 39.6 | 2.1 | 39.4 | 2.2 |
| EBF to 3 months | 57 | 52% | 51 | 50% | 8 | 36% |
| Born in the hungry season | 30 | 27% | 43 | 42% | 6 | 27% |

1. Bold reflects p-value < 0.05

2. Percentages are calculated within classes, not between, i.e. 42% of kids in class 1 have mothers who completed more than primary school

3. Additional four infants were dropped from the multinomial logistic regression due to missing values regarding breastfeeding status

Supplemental table 6: HIV-exposure is related to infant LAZ in multilevel regression

| | Coefficient | SE | P-value |
|---|---------------|--------------|------------------|
| LAZ | | | |
| Maternal HIV | -0.621 | 0.204 | 0.003** |
| Food insecurity (FI) score | -0.001 | 0.020 | 0.966 |
| FI * Maternal HIV | 0.031 | 0.026 | 0.241 |
| Mother completed more than primary school | 0.178 | 0.129 | 0.169 |
| Maternal height | 0.041 | 0.010 | <0.001 |
| Female infant | 0.205 | 0.121 | 0.092 |
| Maternal age | 0.014 | 0.013 | 0.251 |
| Displaced | -0.198 | 0.143 | 0.168 |
| Homemaker | -0.017 | 0.134 | 0.896 |
| Asset index | 0.025 | 0.042 | 0.550 |
| Gestational age | 0.115 | 0.026 | <0.001 |
| EBF to 3 months | -0.078 | 0.124 | 0.532 |
| Born in the hungry season | -0.139 | 0.129 | 0.283 |
| Age* | 0.376 | 0.056 | <0.001 |
| Age ² | -0.127 | 0.015 | <0.001 |
| Sum of skinfolds | | | |
| Maternal HIV | -1.039 | 1.287 | 0.420 |
| Food insecurity (FI) score | -0.049 | 0.123 | 0.693 |
| FI * Maternal HIV | 0.126 | 0.166 | 0.447 |
| Mother completed more than primary school | 0.600 | 0.810 | 0.460 |
| Maternal height | -0.060 | 0.065 | 0.359 |
| Female infant | 0.522 | 0.762 | 0.494 |
| Maternal age | -0.096 | 0.079 | 0.222 |
| Displaced | 0.938 | 0.909 | 0.303 |
| Homemaker | -0.626 | 0.844 | 0.459 |
| Asset index | 0.303 | 0.262 | 0.249 |
| Gestational age | -0.045 | 0.165 | 0.784 |
| EBF to 3 months | -0.629 | 0.781 | 0.422 |
| Born in the hungry season | 1.841 | 0.838 | 0.029 |
| Age* | 15.035 | 0.637 | <0.001 |
| Age ² | -3.539 | 0.164 | <0.001 |

* Age is days / 100

** Bold reflects p-value < 0.05