

**Supplementary Table 1. Infant characteristics stratified by availability of infant length for age z scores at 6 months of age.**

| <b>Early infant factors</b>                       | <b>Length for age z scores available at 6 months</b> | <b>Length for age z scores not available at 6 months</b> |
|---|--|--|
| <b>Neonatal factors</b>                           |  |  |
| Birthweight (grams)                               | 3086.3 [568.2]                                       | 3155 [393.7]   |
| Gestational age at delivery (weeks)               | 39.1 [2.0]   | 38.4 [3.07]  |
| Male sex  | 53.3% (557/1045)                                     | 55.9% (71/127)   |
| <b>Child care practices</b>                       |  |  |
| Exclusive breast feeding at six weeks of age      | 33.2% (344/1037)                                     | 35.1% (33/94)  |
| Use of formula at six weeks of age                | 61.0% (633/1037)                                     | 55.8% (53/95)  |
| <b>Haematological status at six months of age</b> |  |  |
| Haemoglobin (g/dL)                                | 110.3 [11.3]   | 113.7 [8.7]  |

Mean[SD] or percent (frequency) are presented.

**Supplementary Table 2. Associations between maternal factors in early pregnancy and infant birth weight, grams (univariable and multivariable regression)**

| Maternal factors in early pregnancy                            | Univariable regression    |                  | Multivariable regression <sup>1</sup> |                  |
|--|---------------------------|------------------|---------------------------------------|------------------|
|  | Coefficient (95% CI)      | P value          | Coefficient (95% CI)                  | P value          |
| <b>Demographic factors</b>                                     |                           |                  |                                       |                  |
| Maternal age (years)   | 3.89 (-0.99 to 8.76)      | 0.12             |                                       |                  |
| Education  |                           |                  |                                       |                  |
| Primary  | Reference                 | -                | Reference                             | -                |
| Secondary  | -76.7 (-144.5 to -9.04)   | 0.03             | -78.8 (-144.5 to -13.0)               | <b>0.02</b>      |
| University   | 15.2 (-66.6 to 97.1)      | 0.72             | 37.9 (-40.6 to 116.5)                 | 0.34             |
| Gravidity  |                           |                  |                                       |                  |
| Primigravida   | Reference                 | -                | Reference                             | -                |
| Multigravida   | 170.7 (120.1 to 221.3)    | <b>&lt;0.001</b> | 176.3 (122.7 to 236.0)                | <b>&lt;0.001</b> |
| <b>Nutritional and health status</b>                           |                           |                  |                                       |                  |
| Height (cm)  | 19.75 (14.87 to 24.62)    | <b>&lt;0.001</b> | 20.1 (15.2 to 24.6)                   | <b>&lt;0.001</b> |
| Body mass index at enrolment (kg/m <sup>2</sup> )              | 38.8 (26.9 to 50.7)       | <b>&lt;0.001</b> | 40.6 (29.0 to 52.1)                   | <b>&lt;0.001</b> |
| Mid upper arm circumference enrolment (cm)                     | 21.6 (13.8 to 29.5)       | <b>&lt;0.001</b> | 30.5 (19.1 to 42.0)                   | <b>&lt;0.001</b> |
| Depression on enrolment (EPDS)                                 | -30.4 (-91.62 to 30.92)   | 0.33             |                                       |                  |
| <b>Antenatal practices</b>                                     |                           |                  |                                       |                  |
| Change of diet when pregnant                                   | -7.8 (-63.00 to 47.42)    | 0.78             |                                       |                  |
| Meat intake during pregnancy at enrolment (no. times per week) | -1.6 (-12.05 to 8.92)     | 0.77             |                                       |                  |
| Use of traditional supplements during pregnancy                | -116.7 (-227.35 to -6.07) | <b>0.04</b>      |                                       |                  |
| <b>Micronutrient status</b>                                    |                           |                  |                                       |                  |
| Haemoglobin enrolment (per 10g/dL)                             | -143 (-338 to 52)         | 0.15             |                                       |                  |
| Ferritin enrolment (log <sub>2</sub> ug/L) <sup>2</sup>        | -13.4 (-47.10 to 20.21)   | 0.43             |                                       |                  |
| B12 enrolment (log <sub>2</sub> pmol/L) <sup>2</sup>           | -0.7 (-67.58 to 66.15)    | 0.98             |                                       |                  |
| Folate enrolment (log <sub>2</sub> nmol/L) <sup>2</sup>        | 32.3 (-26.78 to 91.35)    | 0.28             |                                       |                  |

<sup>1</sup> Model adjusted for maternal age, gravidity, gestational age at enrolment, trial intervention and infant sex.

<sup>2</sup> log<sub>2</sub> transformed - regression coefficient represents mean change in infant birth weight associated with a two-fold change in ferritin, B12 or folate.

**Supplementary Table 3. Associations between maternal factors in late pregnancy and infant birth weight, grams (univariable and multivariable regression).**

| Maternal factors in late pregnancy                                      | Univariable regression     |         | Multivariable regression <sup>1</sup> |         |
|---|----------------------------|---------|---------------------------------------|---------|
|   | Coefficient (95% CI)       | P value | Coefficient (95% CI)                  | P value |
| <b>Nutritional and health status</b>                                    |                            |         |                                       |         |
| Body mass index at 32 weeks gestation (kg/m <sup>2</sup> )              | 49.6 (95% CI 38.3 to 60.9) | <0.001  | 51.1 (39.8 to 62.4)                   | <0.001  |
| Gestational weight gain (kg)  | 22.38 (13.43 to 31.34)     | <0.001  | 24.8 (15.3 to 34.2)                   | <0.001  |
| Depression at 32 weeks gestation (EPDS)                                 | -90.40 (-164.86 to -15.95) | 0.02    |                                       |         |
| <b>Antenatal practices</b>  |                            |         |                                       |         |
| Change of diet at 32 weeks gestation                                    | -45.66 (-103.54 to 12.22)  | 0.12    |                                       |         |
| Meat intake during pregnancy at 32 weeks gestation (no. times per week) | -0.64 (-13.54 to 12.26)    | 0.92    |                                       |         |
| Use of traditional supplements during pregnancy                         | -0.65 (-194.41 to 193.11)  | 0.99    |                                       |         |
| <b>Micronutrient status</b>   |                            |         |                                       |         |
| Haemoglobin (per 10g/dL)  | -269 (-468 to -70)         | 0.01    | -268 (-459 to -76)                    | 0.01    |
| Ferritin log <sub>2</sub> ug/L) <sup>2</sup>                            | -58.40 (-95.44 to -21.35)  | <0.001  | -66.7 (-104.1 to -29.2)               | 0.001   |
| Ferritin quartile (4-17ug/L) (n=276)                                    | Reference                  | -       | Reference                             | -       |
| Ferritin quartile (18-28ug/L) (n=240)                                   | 9.9 (-58.1 to 77.9)        | 0.72    | -4.2 (-70.4 to 62.0)                  | 0.90    |
| Ferritin quartile (29-42ug/L) (n=260)                                   | -27.8 (-94.5 to 38.9)      | 0.41    | -38.9 (-103.8 to 26.1)                | 0.24    |
| Ferritin quartile (43-273ug/L) (n=243)                                  | -90.6 (-158.4 to -22.8)    | 0.01    | -106.4 (-174.9 to -38.0)              | 0.01    |
| B12 (log <sub>2</sub> pmol/L) <sup>2</sup>                              | -61.88 (-135.73 to 11.97)  | 0.10    |                                       |         |
| Folate (log <sub>2</sub> nmol/L) <sup>2</sup>                           | -20.13 (-83.98 - 43.72)    | 0.54    |                                       |         |
| Vitamin D (per 20nmol/L)  | -0.47 (-1.60 to 0.65)      | 0.41    |                                       |         |
| Urinary iodine (log <sub>2</sub> ug/L) <sup>2</sup>                     | -17.04 (-46.14 to 12.06)   | 0.25    |                                       |         |

<sup>1</sup> Model adjusted for maternal age, gravidity, gestational age at enrolment, trial intervention, and infant sex

<sup>2</sup> log<sub>2</sub> transformed - regression coefficient represents mean change in infant birth weight associated with a two-fold change in ferritin, B12, folate or iodine