

**Kouwenhoven et al.**

**Supplementary Materials:** The following are available online at [www.mdpi.com/xxx/s1](http://www.mdpi.com/xxx/s1)

**Table S1.** Metabolic and hormonal markers at 4 months in relation to growth and body composition (measured with ADP only) through the age of 2 years.

| Metabolic and hormonal markers | Age at body composition measurement | Fat mass. g | 95%CI           | <i>P</i>    | Fat free mass. g | 95%CI           | <i>P</i>    | Fat mass. % | 95%CI       | <i>P</i>     |
|--------------------------------|-------------------------------------|-------------|-----------------|-------------|------------------|-----------------|-------------|-------------|-------------|--------------|
| <i>Glucose at 4 months</i>     |                                     |             |                 |             |                  |                 |             |             |             |              |
|                                | 4 months                            | 156.27      | -144.64, 457.18 | 0.31        | 43.12            | -202.09, 288.33 | 0.73        | 1.71        | -0.71, 4.14 | 0.17         |
|                                | 6 months                            | 92.50       | -210.35, 395.34 | 0.55        | 178.13           | -68.60, 424.85  | 0.16        | 0.32        | -2.12, 2.76 | 0.80         |
|                                | 2 years                             | -91.92      | -470.22, 286.38 | 0.63        | 319.29           | 13.20, 625.39   | <b>0.04</b> | -0.95       | -3.99, 2.09 | 0.54         |
| <i>Insulin at 4 months</i>     |                                     |             |                 |             |                  |                 |             |             |             |              |
|                                | 4 months                            | 9.45        | -13.50, 32.39   | 0.42        | -4.14            | -22.93, 14.65   | 0.66        | 0.14        | -0.04, 0.33 | 0.13         |
|                                | 6 months                            | 16.62       | -6.33, 39.57    | 0.16        | 4.03             | -14.77, 22.82   | 0.67        | 0.16        | -0.03, 0.34 | 0.10         |
|                                | 2 years                             | 24.17       | -3.73, 52.07    | 0.09        | -31.69           | -54.34, -9.05   | <b>0.01</b> | 0.23        | 0.01, 0.46  | <b>0.04*</b> |
| <i>HOMA-IR at 4 months</i>     |                                     |             |                 |             |                  |                 |             |             |             |              |
|                                | 4 months                            | 40.37       | -58.31, 139.04  | 0.42        | -14.15           | -94.98, 66.69   | 0.73        | 0.60        | -0.20, 1.39 | 0.14         |
|                                | 6 months                            | 69.69       | -29.07, 168.46  | 0.17        | 20.15            | -60.75, 101.05  | 0.62        | 0.62        | -0.16, 1.39 | 0.12         |
|                                | 2 years                             | 92.71       | -23.55, 208.96  | 0.12        | -123.16          | -217.70, 28.63  | <b>0.01</b> | 0.91        | -0.02, 1.84 | 0.06         |
| <i>Leptin at 4 months</i>      |                                     |             |                 |             |                  |                 |             |             |             |              |
|                                | 4 months                            | 40.74       | 8.06, 73.42     | <b>0.01</b> | 31.96            | 5.15, 58.77     | <b>0.02</b> | 0.31        | 0.05, 0.57  | <b>0.02</b>  |
|                                | 6 months                            | 46.46       | 13.96, 78.97    | <b>0.01</b> | 30.50            | 3.83, 57.17     | <b>0.03</b> | 0.33        | 0.07, 0.58  | <b>0.01</b>  |
|                                | 2 years                             | 52.78       | 13.83, 91.73    | <b>0.01</b> | 19.51            | -12.21, 51.22   | 0.23        | 0.28        | -0.02, 0.59 | 0.07         |
| <i>IGF-1 at 4 months</i>       |                                     |             |                 |             |                  |                 |             |             |             |              |
|                                | 4 months                            | 1.02        | -1.83, 3.87     | 0.48        | 0.65             | -1.70, 3.00     | 0.59        | 0.01        | -0.01, 0.03 | 0.45         |

|                            |          |        |               |                  |       |               |                  |        |                |              |
|----------------------------|----------|--------|---------------|------------------|-------|---------------|------------------|--------|----------------|--------------|
|                            | 6 months | -0.04  | -2.89, 2.82   | 0.98             | 1.10  | -1.25, 3.46   | 0.36             | -0.005 | -0.03, 0.02    | 0.68         |
|                            | 2 years  | 2.39   | -1.58, 6.37   | 0.24             | -0.45 | -3.67, 2.78   | 0.78             | 0.02   | -0.01, 0.05    | 0.26         |
| <i>IGF-BP1 at 4 months</i> |          |        |               |                  |       |               |                  |        |                |              |
|                            | 4 months | -3.17  | -10.19, 3.85  | 0.37             | -4.70 | -10.42, 1.03  | 0.11             | -0.02  | -0.07, 0.04    | 0.59         |
|                            | 6 months | -2.18  | -9.18, 4.83   | 0.54             | -9.79 | -15.51, -4.08 | <b>&lt;0.001</b> | 0.02   | -0.04, 0.07    | 0.52         |
|                            | 2 years  | -15.91 | -25.21, -6.61 | <b>&lt;0.001</b> | -0.96 | -8.49, 6.57   | 0.80             | -0.12  | -0.19, -0.04   | <b>0.002</b> |
| <i>IGF-BP2 at 4 months</i> |          |        |               |                  |       |               |                  |        |                |              |
|                            | 4 months | -0.27  | -0.88, 0.33   | 0.37             | -0.55 | -1.03, -0.06  | <b>0.03</b>      | -0.001 | -0.01, 0.004   | 0.80         |
|                            | 6 months | -0.40  | -1.01, 0.21   | 0.19             | -0.88 | -1.37, -0.40  | <b>&lt;0.001</b> | -0.001 | -0.01, 0.004   | 0.73         |
|                            | 2 years  | -0.03  | -0.85, 0.79   | 0.94             | -0.39 | -1.04, 0.26   | 0.23             | 0.002  | -0.005, 0.01   | 0.63         |
| <i>IGF-BP3 at 4 months</i> |          |        |               |                  |       |               |                  |        |                |              |
|                            | 4 months | 0.20   | -0.01, 0.41   | 0.06             | 0.19  | 0.02, 0.35    | <b>0.03</b>      | 0.002  | -0.0001, 0.003 | 0.06         |
|                            | 6 months | 0.23   | 0.03, 0.43    | <b>0.03</b>      | 0.31  | 0.15, 0.47    | <b>&lt;0.001</b> | 0.001  | -0.0004, 0.003 | 0.14         |
|                            | 2 years  | -0.28  | -0.56, 0.00   | 0.05             | 0.26  | 0.03, 0.49    | <b>0.03</b>      | -0.002 | -0.004, 0.0002 | 0.07         |

Values are associations between metabolic and hormonal markers and growth and body composition using linear mixed model analysis adjusted for feeding group and sex. BF, breast-fed; CTRL, control formula; mLP, modified low-protein formula. \* Different outcome (level of significance) between original Table (Table 5).