Supplementary Table 1: Demographic data of the human intervention group (Maternal-INTh) and the human control group (Maternal-COh).

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Group** | **n** | **%** |
| **German nationality** | Maternal-COh | 15 | 92.3 |
| Maternal-INTh | 19 | 84.2 |
| **Socio-economic status (SES)** |  |  |  |
|  **high** | Maternal-COh | 11 | 84.6 |
| Maternal-INTh | 16 | 84.2 |
|  **middle** | Maternal-COh | 2 | 15.4 |
| Maternal-INTh | 3 | 15.8 |
|  **low** | Maternal-COh | 0 | 0.0 |
| Maternal-INTh | 0 | 0.0 |
| **Smoking during 1. Trimenon** | Maternal-COh | 13 | 0.0 |
| Maternal-INTh | 19 | 0.0 |
| **First Child** | Maternal-COh | 15 | 76.9 |
| Maternal-INTh | 19 | 78.9 |

Supplementary Table 2: Amount of moderate physical activity before and during pregnancy between the human intervention group (Maternal-INTh) and the human control group (Maternal-COh) measured by questionnaire.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Group** | **n** | **Mean (SEM)** | **P-Value\*** |
| **Amount of moderate physical activity before pregnancy (minutes/week)** | Maternal-COh | 13 | 165.2 (44.1) | 0.334 |
| Maternal-INTh | 19 | 231.3 (48.2) |
| **Amount of moderate physical activity during 1. Trimenon (minutes/week)** | Maternal-COh | 13 | 85.4 (23.0) | 0.424 |
| Maternal-INTh | 19 | 122.5 (34.3) |
| **Amount of moderate physical activity during 2. Trimenon (minutes/week)** | Maternal-COh | 13 | 60.9 (20.0) | <0.001 |
| Maternal-INTh | 19 | 239.5 (21.8) |
| **Amount of moderate physical activity during 3. Trimenon (minutes/week)** | Maternal-COh | 13 | 92.7 (36.5) | 0.253 |
| Maternal-INTh | 19 | 172.1 (50.4) |

standard error of the mean (SEM), \* unpaired t-test.

Supplementary Table 3: Anthropometric and demographic data at baseline (T0) between the human intervention group (Maternal-INTh) and the human control group (Maternal-COh) during pregnancy.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Group** | **n** | **min** | **max** | **mean** | **SEM** | **P-value\*** |
| **Age (years)** | Maternal-COh | 15 | 23.0 | 37.0 | 29.7 | 1.1 | 0.013 |
| Maternal-INTh | 19 | 25.0 | 39.0 | 33.2 | 0.8 |
| **Height (cm)** | Maternal-COh | 15 | 160.0 | 177.0 | 166.9 | 1.1 | 0.380 |
| Maternal-INTh | 19 | 160.0 | 176.0 | 168.5 | 1.3 |
| **Pre-pregnancy weight (kg)** | Maternal-COh | 15 | 48.5 | 83.3 | 64.3 | 3.0 | 0.880 |
| Maternal-INTh | 19 | 49.0 | 89.0 | 63.8 | 2.0 |
| **Pre-pregnancy BMI (kg/m2)** | Maternal-COh | 15 | 17.2 | 29.5 | 22.9 | 1.0 | 0.700 |
| Maternal-INTh | 19 | 19.1 | 31.5 | 22.4 | 0.6 |
| **% body fat** | Maternal-COh | 12 | 14.9 | 26.0 | 20.7 | 0.9 | 0.043 |
| Maternal-INTh | 19 | 16.6 | 37.1 | 25.7 | 1.4 |
| **Parity** | Maternal-COh | 15 | 0 | 2 | 0.3 | 0.2 | 0.670 |
| Maternal-INTh | 19 | 0 | 2 | 0.4 | 0.2 |

minimum (min), maximum (max) standard error of the mean (SEM), \* unpaired t-test.