**Supplemental Table 1.** Means and between-group differences in energy and dietary fat intake over the 8-week trial.

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | LF Diet |  | HF Diet |  | Between-Group Difference |  | Time-Diet Interaction (*P*) |
| **Energy (MJ)** |  |  |  |  |  |  | 0.016 |
| Baseline | 10.7 (6.9, 14.4) |  | 8.3 (4.5, 12.1) |  | -2.4 (-6.3, 1.6) |  |  |
| Week 8 | 8.1 (5.0, 11.2) |  | 10.4 (7.3, 13.5) |  | 2.3 (0.5, 4.2)† |  |  |
| **Total Fat (g)** |  |  |  |  |  |  | 0.006 |
| Baseline | 107.4 (65.5, 149.3) |  | 83.3 (41.3, 125.2) |  | -24.1 (-77.8, 29.5) |  |  |
| Week 8 | 29.8 (-3.1, 62.6)\*\* |  | 111.6 (78.8, 144.5) |  | 81.9 (50.3, 113.4)††† |  |  |
| **Energy from Fat (%)** |  |  |  |  |  |  | <0.001 |
| Baseline | 35.1 (30.3, 39.9) |  | 36.4 (31.6, 41.3) |  | 1.3 (-6.2, 8.8) |  |  |
| Week 8 | 14.8 (10.0, 19.7)\*\*\* |  | 39.9 (35.0, 44.7) |  | 25.0 (19.5. 30.5)††† |  |  |

Data presented as mean and 95% CI. Between-group difference calculated as HF diet – LF diet; Estimated means, CIs and *P*-values obtained under a mixed model including twin pair as a random effect. Post-hoc Sidak’s test, CI and time-diet interaction are reported.   
LF, low-fat; HF, high-fat  
Significantly different from baseline: \*\* *P* < 0.01, \*\*\* *P* < 0.001; significant between-group difference: † *P* < 0.05, ††† *P* < 0.001