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| | CON | | CAL | | |
|--|-----------------|-----------------|------------------|------------------------|-------------------------------------|
| Variable | Pre | Post | Pre | Post | ANOVA supplement x time interaction |
| Energy expenditure rate (kJ/min) | 8.76 ± 1.29 | 8.23 ± 1.46 | 8.49 ± 0.96 | 8.09 ± 0.85 | P = 0.864 |
| Fat oxidation rate (g/min) | 0.07 ± 0.04 | 0.07 ± 0.04 | 0.07 ± 0.03 | 0.07 ± 0.05 | P = 0.652 |
| Carbohydrate oxidation rate (g/min) | 0.39 ± 0.11 | 0.33 ± 0.12 | 0.36 ± 0.09 | 0.33 ± 0.12 | P = 0.581 |
| Glucose concentration (mmol/L) | 5.07 ± 0.31 | 5.02 ± 0.37 | 4.82 ± 0.60 | 5.01 ± 0.50 | P = 0.358 |
| Lactate concentration (mmol/L) | 1.83 ± 0.47 | 1.70 ± 0.45 | 1.56 ± 0.21 | 1.82 ± 0.45 | P = 0.105 |
| NEFA concentration (mmol/L) | 0.35 ± 0.16 | 0.37 ± 0.21 | 0.31 ± 0.13 | 0.37 ± 0.22 | P = 0.363 |
| Glycerol concentration (mmol/L) | 0.63 ± 0.36 | 0.62 ± 0.31 | 0.45 ± 0.23 | 0.44 ± 0.21 | P = 0.702 |
| Insulin concentration (pmol/L) | 80 ± 30 | 71 ± 27 | $70 \pm 28*$ | $83 \pm 33^{*\dagger}$ | P = 0.006 |
| HOMA-IR (au) | 2.55 ± 1.08 | 2.30 ± 0.91 | $2.13 \pm 0.87*$ | $2.67 \pm 1.10*$ | <i>P</i> =0.029 |
| GIP ₁₋₄₂ concentration (pmol/L) | 2.5 ± 2.7 | 2.0 ± 1.7 | 1.0 ± 0.7 | 1.4 ± 1.2 | P = 0.982 |
| Total GLP-1 concentration (pmol/L) | 1.6 ± 2.3 | 1.4 ± 1.8 | 2.2 ± 4.1 | 2.0 ± 2.6 | P = 0.128 |
| PTH concentration (pmol/L) | 4.6 ± 2.3 | 3.4 ± 1.4 | 4.5 ± 2.8 | 4.0 ± 1.4 | P = 0.201 |

Table 1 Substrate metabolism and circulating variables at rest before and after supplementation with CON or CAL.

CON, control; CAL, high-calcium; NEFA, non-esterified fatty acid; GIP₁₋₄₂, glucose-dependent insulinotropic polypeptide₁₋₄₂; GLP-1, glucagonlike peptide-1; PTH, parathyroid hormone; HOMA-IR, homeostasis model assessment of insulin resistance. Data are mean \pm SD. n = 13 for energy expenditure and substrate metabolism, n = 12 for blood-based variables. Holm-Bonferroni post-hoc analysis: *Significantly different to CON at same time point, *Significantly different to Pre, P < 0.05.