Supplement 3.

Raw data shown as mean ± standard deviation of all outcomes.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **HIIT** | |  | **MCT** | |
| **Outcomes** | **Units** | mean | standard deviation |  | mean | standard deviation |
| IL-6\_t0 | [pg/mL] | 1.44457641 | 1.60197 |  | 1.48287 | 1.23214 |
| IL-6\_t1 | 1.53724 | 1.65304 |  | 1.57437 | 1.30986 |
| IL-6\_t2 | 1.83944 | 1.46002 |  | 2.12860 | 1.37085 |
| IL-6\_t3 | 1.40027 | 1.51043 |  | 1.54616 | 1.17092 |
| pNfL\_t0 | [pg/mL] | 11.86970 | 6.66989 |  | 9.98294 | 5.97826 |
| pNfL\_t1 | 10.53364 | 5.89894 |  | 9.55970 | 5.56170 |
| pNfL\_t2 | 11.00000 | 7.00516 |  | 10.26265 | 6.93202 |
| pNfL\_t3 | 12.41484 | 7.81225 |  | 10.52697 | 6.00310 |
| TRP\_t0 | [μg/mL] | 12.32587 | 3.34181 |  | 12.03498 | 3.21878 |
| TRP\_t1 | 11.57790 | 3.09145 |  | 11.75495 | 3.08482 |
| TRP\_t2 | 11.18910 | 2.85019 |  | 10.99396 | 2.93714 |
| TRP\_t3 | 11.51654 | 3.63024 |  | 12.01727 | 3.17962 |
| KYN\_t0 | [ng/mL] | 360.03550 | 94.75502 |  | 372.58423 | 120.64483 |
| KYN\_t1 | 359.85216 | 99.57640 |  | 371.31556 | 116.03145 |
| KYN\_t2 | 342.98506 | 92.02769 |  | 347.89369 | 111.18566 |
| KYN\_t3 | 370.11595 | 105.73420 |  | 365.10937 | 99.38417 |
| QA\_t0 | [ng/mL] | 74.52737 | 20.43584 |  | 74.36175 | 25.07215 |
| QA\_t1 | 76.11737 | 22.54577 |  | 74.75830 | 24.77975 |
| QA\_t2 | 75.75740 | 22.81975 |  | 73.92415 | 25.32070 |
| QA\_t3 | 78.82198 | 22.79885 |  | 73.34610 | 20.78270 |
| KA\_t0 | [ng/mL] | 6.66950 | 2.22593 |  | 6.49542 | 2.51003 |
| KA\_t1 | 7.40276 | 2.67333 |  | 6.66055 | 2.79420 |
| KA\_t2 | 6.66177 | 2.72783 |  | 5.68762 | 1.94355 |
| KA\_t3 | 6.46838 | 2.27158 |  | 6.67482 | 2.86923 |
| KYNTRP\_ratio\_t0 | a.u. | 0.03109 | 0.01139 |  | 0.03241 | 0.01177 |
| KYNTRP\_ratio\_t1 | 0.03321 | 0.01298 |  | 0.03330 | 0.01159 |
| KYNTRP\_ratio\_t2 | 0.03224 | 0.01111 |  | 0.03329 | 0.01251 |
| KYNTRP\_ratio\_t3 | 0.03470 | 0.01286 |  | 0.03228 | 0.01066 |
| QAKYN\_ratio\_t0 | a.u. | 0.21433 | 0.04608 |  | 0.20095 | 0.03338 |
| QAKYN\_ratio\_t1 | 0.21810 | 0.04561 |  | 0.20292 | 0.03945 |
| QAKYN\_ratio\_t2 | 0.22650 | 0.04488 |  | 0.21449 | 0.04359 |
| QAKYN\_ratio\_t3 | 0.21905 | 0.04010 |  | 0.20127 | 0.03270 |
| KAKYN\_ratio\_t0 | a.u. | 0.01925 | 0.00696 |  | 0.01788 | 0.00664 |
| KAKYN\_ratio\_t1 | 0.02130 | 0.00785 |  | 0.01817 | 0.00640 |
| KAKYN\_ratio\_t2 | 0.02026 | 0.00848 |  | 0.01705 | 0.00637 |
| KAKYN\_ratio\_t3 | 0.01817 | 0.00625 |  | 0.01859 | 0.00749 |
| QAKA\_ratio\_t0 | a.u. | 12.08227 | 4.20168 |  | 12.59451 | 4.42273 |
| QAKA\_ratio\_t1 | 11.12413 | 3.74749 |  | 12.39324 | 4.50655 |
| QAKA\_ratio\_t2 | 12.48663 | 4.77435 |  | 13.79280 | 4.38475 |
| QAKA\_ratio\_t3 | 13.19097 | 5.42766 |  | 12.29855 | 4.18953 |

IL-6 Interleukin-6; pNfL Plasma neurofilament light chain; TRP Tryptophan; KYN Kynurenine; QA Quinolinic acid; KA Kynurenic acid; t0 Baseline; t1 immediately post exercise; t2 3 hours post exercise. t3 post intervention.