

**Supplementary Table S1.** Time-point of measures of oxygen uptake (VO<sub>2</sub>), carbon dioxide production (VCO<sub>2</sub>), respiratory quotient (RQ) and substrate oxidation in the 10 minutes of the calorimetry test for all groups/supplementation.

<b>VO<sub>2</sub></b>	<b>1min</b>	<b>2min</b>	<b>3min</b>	<b>4min</b>	<b>5min</b>	<b>6min</b>	<b>7min</b>	<b>8min</b>	<b>9min</b>	<b>10min</b>
PLACEBO	0.91±0.2	0.55±0.08 a	0.46±0.04 a,b	0.44±0.05 a,b	0.43±0.06 a,b,c	0.4±0.04 a,b,c,d,e	0.4±0.05 a,b,c,d,e	0.39±0.07 a,b,c,d,e	0.37±0.05 a,b,c,d,e,f	0.37±0.05 a,b,c,d,e,f
TAU 3g	0.93±0.2	0.58±0.09 <sup>a</sup>	0.48±0.05 a,b	0.45±0.02 a,b,c	0.43±0.04 a,b,c	0.4±0.04 a,b,c,d,e	0.4±0.04 a,b,c,d,e	0.39±0.04 a,b,c,d,e	0.38±0.04 a,b,c,d,e	0.38±0.03 a,b,c,d,e,f,g
TAU 6g	1.0±0.1	0.60±0.09 a	0.50±0.06 a,b	0.47±0.08 a,b	0.44±0.05 a,b,c,d	0.4±0.05 a,b,c,d	0.41±0.05 a,b,c,d,e,f	0.40±0.05 a,b,c,d,e,f	0.40±0.05 a,b,c,d,e,f	0.39±0.05 a,b,c,d,e,f,g
<b>VCO<sub>2</sub></b>	<b>1min</b>	<b>2min</b>	<b>3min</b>	<b>4min</b>	<b>5min</b>	<b>6min</b>	<b>7min</b>	<b>8min</b>	<b>9min</b>	<b>10min</b>
PLACEBO	0.79±0.1	0.49±0.07 a	0.41±0.04 a,b	0.39±0.05 a,b	0.38±0.07 a,b	0.36±0.05 a,b,c,d,e	0.34±0.03 a,b,c,d,e	0.33±0.07 a,b,c,d,e,f	0.31±0.05 a,b,c,d,e,f,g	0.30±0.05 a,b,c,d,e,f,g,h
TAU 3g	0.82±0.2	0.53±0.1 a	0.40±0.03 a,b	0.40±0.37 a,b	0.36±0.03 a,b,c	0.34±0.04 a,b,c,d	0.33±0.03 a,b,c,d	0.32±0.03 a,b,c,d,e	0.32±0.05 a,b,c,d	0.30±0.03 a,b,c,d,e,g
TAU 6g	0.87±0.1	0.52±0.08 a	0.42±0.06 a,b	0.40±0.07 a,b,c	0.36±0.04 a,b,c,d	0.36±0.03 a,b,c,d	0.34±0.03 a,b,c,d,f	0.34±0.04 a,b,c,d	0.32±0.04 a,b,c,d,e,f,g	0.31±0.03 a,b,c,d,e,f,g,h
<b>RQ</b>	<b>1min</b>	<b>2min</b>	<b>3min</b>	<b>4min</b>	<b>5min</b>	<b>6min</b>	<b>7min</b>	<b>8min</b>	<b>9min</b>	<b>10min</b>
PLACEBO	0.86±0.07	0.90±0.07 a	0.88±0.06	0.87±0.06	0.88±0.07	0.90±0.11	0.89±0.13	0.86±0.10 b,f	0.83±0.05 a,b,c,d,e,f	0.81±0.07 a,b,c,d,e,f,h,i
TAU 3g	0.83±0.03	0.88±0.05 a	0.88±0.05 a	0.90±0.1 a	0.86±0.06 a,d	0.84±0.06 b,d	0.83±0.05 a,b,c,d,e,f,h	0.82±0.04 b,c,d,e	0.82±0.06 b,c,d,e	0.82±0.05 b,c,d,e
TAU 6g	0.82±0.04	0.86±0.05 a	0.85±0.06 a	0.85±0.06	0.83±0.04	0.83±0.04	0.83±0.04	0.83±0.04 i	0.80±0.41 b,c,d,g	0.78±0.03 a,b,c,d,e,g,i
<b>Oxidation Lipid</b>	<b>1min</b>	<b>2min</b>	<b>3min</b>	<b>4min</b>	<b>5min</b>	<b>6min</b>	<b>7min</b>	<b>8min</b>	<b>9min</b>	<b>10min</b>
PLACEBO	0.21±0.14	0.09±0.08 a	0.09±0.05 a	0.09±0.05 a	0.08±0.06 a	0.06±0.08 a	0.08±0.08 a	0.09±0.06 a,f	0.10±0.03 a,f	0.12±0.04 a,c,e,f,h,i

TAU 3g	0.27±0.09	0.11±0.05 a	0.09±0.05 a	0.07±0.08 a,b	0.10±0.05 a,d	0.10±0.04 a,d	0.11±0.03 a,d	0.12±0.04 a,d	0.11±0.04 a,d	0.11±0.03 a,d
TAU 6g	0.31±0.08	0.14±0.07 a	0.12±0.06 a,b	0.12±0.07 a	0.12±0.05 a	0.12±0.04 a	0.12±0.04 a	0.11±0.04 a	0.13±0.04 a	0.14±0.04 a,h
<b>Oxidation CHO</b>	<b>1min</b>	<b>2min</b>	<b>3min</b>	<b>4min</b>	<b>5min</b>	<b>6min</b>	<b>7min</b>	<b>8min</b>	<b>9min</b>	<b>10min</b>
PLACEBO	0.66±0.28	0.49±0.18 a	0.39±0.13 a,b	0.36±0.13 a,b	0.37±0.18 a,b	0.36±0.21 a,b	0.32±0.17 a,b	0.29±0.17 a,b,c,f	0.23±0.09 a,b,c,d,e,f,h	0.19±0.13 a,b,c,d,e,f,h,i
TAU 3g	0.57±0.18	0.51±0.18	0.41±0.16 a,b	0.43±0.21 a	0.32±0.13 a,b,c,d	0.27±0.12 a,b,c,d	0.24±0.09 a,b,c,d,e,f	0.22±0.09 a,b,c,d,e,g	0.22±0.14 a,b,c,d,e,g	0.21±0.10 a,b,c,d,e,g
TAU 6g	0.60±0.25	0.43±0.16 a	0.35±0.14 a,b	0.32±0.17 a,b	0.26±0.08 a,b,c	0.26±0.09 a,b,c	0.24±0.07 a,b,c	0.25±0.06 a,b,c	0.19±0.08 a,b,c,d,h	0.15±0.06 a,b,c,d,e,f,h,i

Min: minute. TAU 3g: 3 grams of taurine. TAU 6g: 6 grams of taurine. RQ: respiratory quotient. Oxidation CHO: carbohydrate oxidation.

Letters represents statistical difference between time-point.

a= vs 1min; b= vs 2min; c= vs 3min; d= vs 4min; e= vs 5min; f= vs 6min; g= vs 7min; h= vs 8min, i= vs 9min; j= vs 10min.

vs= versus ( $p < 0.05$ ), by ANOVA two way repeated measures. Data expressed as mean and standard deviation (M±SD).

e.g. If letter “a” is in the time 2minutes and 3minutes, this represents that 1minute is statistically different from 2 and 3 minutes.

This representation is only to show differences between time-point in the same group/supplementation.