

1412 Board #220 May 31 8:00 AM - 9:30 AM

Thirst Perception and Fluid Intake are not Affected by Knowledge of Water Losses During ExerciseCatalina Capitán-Jiménez, Luis Fernando Aragón-Vargas, FACSM. *University of Costa Rica, CARTAGO, Costa Rica.* (Sponsor: Luis Fernando Aragon-Vargas, FACSM)*(No relevant relationships reported)*

Thirst perception has been studied as an indicator of acute dehydration during exercise, however, as a perception, it could be affected by the information received about water (sweat) losses. **Purpose:** To identify if thirst perception (TP) can be affected by knowledge of water losses during exercise. **Methods:** 11 males exercised intermittently in the heat on two occasions (30 min bicycle-30 min treadmill, at 70-80%HRmax), to a dehydration of 3.9±0.4% and 3.8±0.4% body mass (BM). TP and heat sensation were measured every 30 minutes during exercise. During session one (S1) they received real information about their water losses; in session two (S2), they received false information about their water losses (60% of their real losses). Information was given every 30 minutes; the order of the sessions was randomly assigned. After finishing the exercise, they ingested water *ad libitum* for 30 minutes. Urine osmolality was measured preexercise, postexercise and at the end of each trial. Data were analyzed using Student's *t* and analysis of variance, as appropriate. **Results:** Preexercise conditions were not statistically different between sessions (Table).

Variable	Real Information (S1)	False Information (S2)	t	p
Body Mass (kg)	76.7±5.2	76.8±5.2	-0.389	0.706
USG (a.u)	1.019±0.07	1.018±0.07	0.135	0.895
Uosm	699.6±256.8	673.5±255.3	0.279	0.786
Thirst perception (mm)	15.09±9.6	22±15.7	-1.38	0.199
WBGT (°C)	28.8±0.1	28.9±0.3	-0.814	0.461

Exercise time was the same (115±22.3 and 110±24.4 min, $t=-1.27$; $p=0.232$). Thirst perception between sessions was also similar (48.26±2.11 and 51.2±3.81, for S1 and S2, respectively; $f=0.661$; $p=0.447$). Thirst perception changed significantly over time in both sessions ($f=44.6$; $p=0.001$), but no interaction ($f=0.382$; $p=0.559$). Power analysis for TP was 79%. Heat sensation showed no differences between sessions (8.14±2.18 and 6.00±0.23, for S1 and S2; $f=0.982$; $p=0.360$) or over time ($f=2.88$; $p=0.140$). Uosm was not different between sessions 659.94±80.59 and 636.09±79.76, for S1 and S2; $f=0.134$; $p=0.722$). Water ingestion was the same between sessions (1220.4±248.6 mL and 1228±421.8 mL; $t=-0.66$, $p=0.949$). **Conclusion:** these results suggest that thirst perception is not affected by knowledge of water losses during exercise.