

67.32±0.17% for 90-min until 3.08±0.04% (1.83±0.10 kg) of their body weight loss. After which, the subjects move to the thermo neutral environment (21.2±0.3°C) and seated for 30 min prior to begin the 2-h R period. During R, subjects drank either SD or PW representing 120% of the fluid lost divided in three boluses representation 50% (915±54 ml), 40% (732±37 ml) and 30% (556±35 ml) at 0, 30, 60 min, respectively. In the entire trials subjects were somewhat hypo hydrated (range 0.32–0.52 kg below initial body weight) after completing the 2-h R period. The percent body weight loss that was regained (used as index of percent rehydration) during SD and PW was 68±2% and 58±2%, respectively, with significantly ($p<0.05$) better R with SD compared with PW. The rehydration index for SD was significantly lower than PW ($p<0.01$). PV was restored similarly to euhydration levels after 2-h of R with SD but was significantly lower ($p<0.05$) with PW trials. Cumulative urine output was significantly higher for PW when compare to SD ($p<0.05$). Serum Cl, Na and K were significantly higher with SD ($p<0.05$) and urine osmolality of PW trial were significantly lower ($p<0.05$) than SD at the end of 2-h R period. Plasma glucose concentration were significantly higher when SD was ingested compared to PW ($p<0.01$). In conclusion, ingesting the volume of 120% of losses still under hypohydrated because of urine production and SD was better than PW for rehydration after exercise-induced dehydration.

136 PERCENTAGE OF VOLUME INTAKE FOR REHYDRATION AFTER EXERCISE-INDUCED DEHYDRATION

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The present cross over study assessed the percentage of dehydration and effectiveness of 120% rehydration (R) with sports drink (SD) and plain water (PW) on whole body rehydration (R), plasma volume (PV) restoration after exercise-induced dehydration. Ten healthy male subjects (age range, 19–27 years) were exercised at 65% of $\dot{V}O_2$ max at an environmental temperature of 32.06±0.02°C on which relative humidity of