Coconut water is as good as ingesting a commercial sports drink for whole body rehydration after exercise-induced dehydration but with better fluid tolerance. - source: GreenMedInfo Summary

Abstract Title:

Rehydration with sodium-enriched coconut water after exercise-induced dehydration.

Abstract Source:

Southeast Asian J Trop Med Public Health. 2007 Jul;38(4):769-85. PMID: 17883020

Abstract Author(s):

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Abstract:

This crossover study assessed the effectiveness of plain water (PW), sports drink (SD), fresh young coconut water (CW) and sodium-enriched fresh young coconut water (SCW) on whole body rehydration (R) and plasma volume (PV) restoration after exercise-induced dehydration. Ten healthy male subjects ran at 65% of VO2max in an environmental temperature of 32.06 + /- 0.02 degree C with a relative humidity (rh) of 53.32 + /- 0.17% for 90 minutes to lose 3% body weight (BW). During the 2-hour rehydration period, subjects drank, in randomized order, PW, SD, CW or SCW equivalent to 120% of BW lost in three boluses representing 50, 40 and 30% of the fluid lost at 0, 30, and 60 minutes, respectively. In all trials subjects were still somewhat dehydrated even after the 2-hour rehydration period. Indexes of percent rehydration with PW, SD, CW and SCW were 58 + /- 2, 68 + /- 2, 65 + /- 2 and 69 + /- 1%, respectively, with significantly better rehydration with SD and SCW. The rehydration indexes for SD and SCW were significantly lower than PW (p<0.01). PV was restored to euhydration levels after 2 hours of rehydration with SD, CW and SCW but not with PW. The plasma glucose concentration were significantly higher when SD, CW and SCW were ingested. SCW was similar in sweetness to CW and SD but caused less nausea and stomach upset compared to SD and PW. In conclusion, ingesting SCW was as good as ingesting a commercial sports drink for whole body rehydration after exercise-induced dehydration but with better fluid tolerance.

Article Published Date: Jul 01, 2007

Study Type: Human Study

Additional Links

Substances: Coconut: CK(124): AC(35), Coconut Water: CK(45): AC(13)

 $\textbf{Diseases}: \underline{\mathsf{Dehydration}}: \mathsf{CK}(43): \mathsf{AC}(7)$