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SP.235 / ESG.SP235 Chemistry of Sports
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supplements

SP.235 - chemistry of sports

Chocolate milk as recovery drink

Appl Physiol Nutr Metab. 2009 Feb;34(1):78-82.

Improved endurance capacity following chocolate milk consumption compared with 2 commercially available sport drinks.

Thomas K, Morris P, Stevenson E.

School of Psychology and Sports Sciences, Northumbria University, Newcastle-upon-Tyne, NE1 8ST, UK.

Abstract: “This study examined the effects of 3 recovery drinks on endurance performance following glycogen-depleting exercise. Nine trained male cyclists performed 3 experimental trials, in a randomized counter-balanced order, consisting of a glycogen-depleting trial, a 4-h recovery period, and a cycle to exhaustion at 70% power at maximal oxygen uptake. At 0 and 2 h into the recovery period, participants consumed chocolate milk (CM), a carbohydrate replacement drink (CR), or a fluid replacement drink (FR). Participants cycled 51% and 43% longer after ingesting CM (32 +/- 11 min) than after ingesting CR (21 +/- 8 min) or FR (23 +/- 8 min). CM is an effective recovery aid after prolonged endurance exercise for subsequent exercise at low-moderate intensities.”

Chocolate milk as recovery drink

Int J Sport Nutr Exerc Metab. 2006 Feb;16(1):78-91.

Chocolate milk as a post-exercise recovery aid.

Karp JR, Johnston JD, Tecklenburg S, Mickleborough TD, Fly AD, Stager JM.

Dept of Kinesiology and Applied Health Science, Human Performance Laboratory, Indiana University, Bloomington 47405, USA.

Abstract: “Nine male, endurance-trained cyclists performed an interval workout followed by 4 h of recovery, and a subsequent endurance trial to exhaustion at 70% VO₂max, on three separate days. Immediately following the first exercise bout and 2 h of recovery, subjects drank isovolumic amounts of chocolate milk, fluid replacement drink (FR), or carbohydrate replacement drink (CR), in a single-blind, randomized design.

Carbohydrate content was equivalent for chocolate milk and CR. Time to exhaustion (TTE), average heart rate (HR), rating of perceived exertion (RPE), and total work (WT) for the endurance exercise were compared between trials. TTE and WT were significantly greater for chocolate milk and FR trials compared to CR trial. The results of this study suggest that chocolate milk is an effective recovery aid between two exhausting exercise bouts.”

Creatine

- French seem to be the only ones who think that it is dangerous
- Resources
 - [orthopedic association thoughts on creatine](#)
 - [UIUC handout](#)
 - [US Gyms link](#)
 - [an entire book on creatine](#)