DATA SET
EXPLORE 1 LESSON 15

The Effects of Low Fat Chocolate Milk on Postexercise Recovery in Collegiate Athletes

Publish Date: December 2011
Publication: Journal of Strength and Conditioning Research
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Link: https://doi.org/10.1519/JSC.0b013e3182163071

Overview of the Study:
Researchers wanted to compare the time to fatigue during a second workout (following an earlier workout) following recovery with either chocolate milk or a carbohydrate replacement beverage. To investigate this, they studied 13 collegiate soccer players (5 males and 8 females*).

Prior to beginning the experiment, each athlete participated in a fitness exercise, which included a shuttle run to determine their time to fatigue and calculate their maximum oxygen consumption (VO_2max).

Each athlete participated in two experimental trials in which athletes completed their morning soccer practice, immediately consumed one of two randomly assigned recovery drinks, rested for two hours, consumed the same recovery drink, followed by an additional 2 hours of rest. After the four hours of rest, athletes participated in their afternoon practice, followed by a 20-minute shuttle run. The two trials were separated by two days. The athletes were not told or able to see which recovery drink they were given. The volume of milk given provided a 1.0 g carbohydrate per kilogram bodyweight.

*Using both genders in the same study is somewhat unique. Many studies use only males to avoid potential complications of varying hormone levels at varying times throughout women's menstrual cycles.

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Figure 1

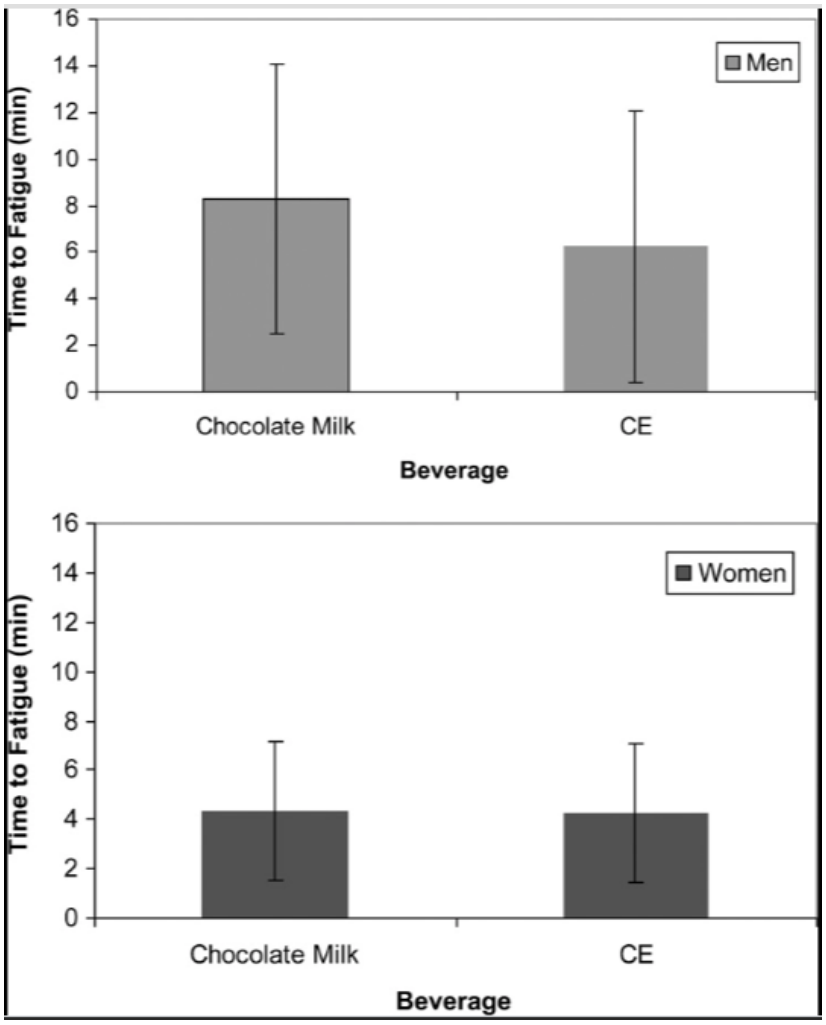

Figure 1 – Mean time to fatigue (min) during shuttle run vs. type of recovery beverage consumed among collegiate soccer players (n = 5 men and 8 women). For the men only, there was a trend of increased time to fatigue with chocolate milk compared to a carbohydrate-electrolyte beverage (CE) (exact p = .03) (Values are means +/- standard deviation).