

How do I know if this article is scholarly?

Try asking yourself these 5 questions. If the answer is **Yes** to all of them then it probably is!

Q4. Is this article published in a journal?
Probably, as the title has the word *journal* in it (though non-scholarly sources such as the *Edmonton Journal* can also sometimes have this word in their title). Other common words in journal titles include *Bulletin*, *Review & Research*.

Q3. Is the article lengthy?
Yes, 13 pages. Popular articles are usually shorter.

Q2. Is the language style formal and using technical jargon?
Yes, you would have to know something about this subject to read this or have a dictionary handy!

Q1. Are the authors experts in the field?
Yes - indicated by their affiliation, they work in the Kinesiology and Health department at a University.

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Chocolate Milk as a Post-Exercise Recovery Aid

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Nine male, endurance-trained cyclists performed an interval workout followed by 4 h of recovery, and a subsequent endurance trial to exhaustion at 70% $\dot{V}O_{2max}$ 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 (W_e) for the endurance exercise were compared between trials. TTE and W_e 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.

Key Words: glycogen resynthesis, endurance performance, nutrition, sports drink

It is well known that endurance exercise performance is influenced by the amount of stored glycogen in skeletal muscles, and that intense endurance exercise decreases muscle glycogen stores (9, 10, 13, 18), leading to a diminution in performance. The resynthesis of glycogen between training sessions occurs most rapidly if carbohydrates (CHO) are consumed within 30 min to 1 h after exercise (9, 13, 17). Indeed, delaying carbohydrate ingestion for 2 h after a workout can reduce the rate of glycogen resynthesis by half (20, 22). To maximize the rate of glycogen resynthesis, it is suggested that 50 to 75 g of CHO be ingested within 30 to 45 min after exercise (1), with ingestion of 1.2 to 1.5 g CHO/kg of body weight/hour for the next few hours (12, 19, 20, 24, 29). Ingesting protein along with carbohydrate (at a CHO-to-protein ratio of 2 to 2.9:1) has been shown to hasten the rate of glycogen synthesis and improve endurance performance, especially when the amount of carbohydrate ingested is less than current recommendations (20, 21, 35, 39). Of particular importance is the study of Ivy et al. (23), who found that the ingestion of a solution containing a 4:1 CHO-to-protein ratio improved endurance performance

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Q5. Are there references?
Yes, there are many.

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