
Abstract

Eliakim, M, Bodner, E, Eliakim, A, Nemet, D, and Meckel, Y. Effect of motivational music on lactate levels during recovery from intense exercise. J Strength Cond Res 26(1): 80-86, 2012-The effects of music played during an exercise task on athletic performance have been previously studied. Yet, these results are not applicable for competitive athletes, who can use music only during warm-up or recovery from exercise. Therefore, the aim of this study was to determine the effect of motivational music (music that stimulates or inspires physical activity) during recovery from intense exercise, on activity pattern, rate of perceived exertion (RPE), and blood lactate concentration. Twenty young, active men (mean age 26.2 ± 2.1 years) performed a 6-minute run at peak oxygen consumption speed (predetermined from the VO₂ max test). The mean heart rate (HR), RPE, number of steps (determined by step counter), and blood lactate concentrations were determined at 3, 6, 9, 12, and 15 minutes during the recovery from the exercise, with and without motivational music (2 separate sessions, at random order). There was no difference in the mean HR during the recovery with and without music. Listening to motivational music during the recovery was associated with increased voluntary activity of the participants, determined by increased number of steps (499.4 ± 220.1 vs. 413.2 ± 150.6 steps, with and without music, respectively; p ≤ 0.05). The increased number of steps during the recovery was accompanied by a significantly greater decrease in blood lactate concentration percentage (28.1 ± 12.2 vs. 22.8 ± 10.9%, with and without music, respectively, p ≤ 0.05). This was associated with a greater decrease in RPE (77.7 ± 14.4 vs. 73.1 ± 14.7% with and without music, respectively; p ≤ 0.05). Our results suggest that listening to motivational music during nonstructured recovery from intense exercise leads to increased activity, faster lactate clearance, and reduced RPE and therefore may be used by athletes in their effort to enhance recovery.