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Cold Water Immersion vs. Passive Rest: Effects on Athletic Recovery

CONFERENCE ABSTRACT

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Abstract

Cold water immersion (CWI) is used by athletes to improve recovery following intensive exercise. CWI is believed to reduce fatigue and help maintain performance, but its effectiveness compared to passive rest is still not fully understood. Performance measures such as jump height, strength, and muscular endurance are often used to assess recovery in athletes. The purpose of this study is to compare the effects of CWI and passive rest on performance following a fatiguing exercise protocol. In this study, 12 collegiate athletes were recruited to participate. Participants completed a lower body exercise protocol designed to induce fatigue. Following the exercises, jump height, strength, muscular endurance, and perceived recovery were measured. Participants were then placed into one of two conditions: CWI or passive rest. The CWI condition involved sitting in water up to their hips at 10-12 degrees Celsius, while the passive rest condition involves seated rest with no recovery intervention. Performance metrics were measured again after 6 hours of recovery and results were analyzed to compare differences between the two conditions. Based on previous research, participants in the CWI condition were expected to show a smaller decrease in performance compared to those in the passive rest condition. Jump height, strength, and muscular endurance were expected to decline less following CWI, indicating improved

recovery. It was expected that CWI will be found as a more effective recovery strategy than passive resting.

Keywords: cold water immersion, student-athlete, injury, recovery