

The Effects of Dehydration on Body Mass and Game Performance in Division III Male Hockey Players

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Abstract

Being dehydrated and losing >2% body mass (BM), increases your risk for performance decrement. The effects of dehydration on game performance in team sports is not well understood. The purpose of this study was to determine the effects of dehydration on game performance in collegiate hockey players. It was hypothesized that dehydration resulting in >2% BM loss would decrease shooting differential and save percentage from the 1st to the 3rd period. Participants consisted of 20, healthy, Division III male hockey players (22 ± 1 years old). 30 minutes after arriving at the rink, a pre-game BM measurement was taken. Immediately after the conclusion of the game, another BM was recorded. Shooting differential and save percentage during even strength play was tracked during the 1st and 3rd period. There were no significant difference in dehydration over the course of the 4 games. There was no significant, relationship between body mass loss and shooting differential. Though not significant, there was a moderate, negative correlation between body mass loss and save percentage from the 1st to the 3rd period. Sustained performance in the later facets of games is necessary for athletes during team competition. The findings from the present study show that mild dehydration resulting from the of loss of >2% BM, effects positions differently, as it does not negatively impact shooting differential, but does impact save percentage between the 1st and 3rd period. Further research is necessary in order to determine the impacts of dehydration on game performance in hockey players.