

AN ANALYSIS OF THE HYDRATION STATUS OF 15 TO 18 YEAR OLD ADOLESCENT MALES OF THE W-CONNECTION FOOTBALL CLUB

Kellie Brewster

Project Supervisor: Dr. Isabella Granderson

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Background: Levels of minimal dehydration are capable of decreasing athletic performance and many athletes have not been found to adhere to recommendations in order to maintain a hydrated state.

Objective: The aim of this case study was to identify the hydration status of adolescent males between 15 and 18 years of the W-Connection football club with objectives to state the hydration status of the population, assess their percentage adherence to fluid recommendations, create a dehydration index and calculate sweat rate. Seventeen (n=17) individuals of good perceived health within the age range of 15 to 18 from the football club were assessed for hydration status using indices of percentage weight loss, urine colour and thirst over a 3 day period.

Design: Fluid consumption and type of beverage consumed were assessed through the use of recall questionnaires and relevant parameters were identified through Cronbach's Alpha test and used to ultimately predict a score of degree of dehydration.

Results: Results revealed that the overall hydration status of the study population was minimal dehydration but showed overall urine colour indices of serious dehydration (6 ± 0.79). Additionally at least 60 percent of the population was unable to achieve percentage adherence to fluid requirements over 59 percent, 3 hours before, 20 minutes before and during exercise. An index was created using thirst before training over 3 days, urine colour over 3 days and mode thirst during exercise with a maximum score of 20 indicating the highest degree of dehydration. Sweat rates were calculated and the average found to be greater than the norm (1.59 ± 0.87 L/h).

Conclusion: It is recommended that fluids be consumed in adequate amounts before training so that maximum hydration can be achieved pre- exercise, to minimise the degree of dehydration post exercise. Additionally, an electrolyte containing drink should be consumed during training.