



FSEM Twelfth annual scientific conference

“Sports Injuries and illness in young people”

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Royal College of Surgeons in Ireland, 123 St Stephen’s Green Dublin 2

O.45 Effects of acute sleep deprivation on aerobic and skills performance following caffeine supplementation.

McIntyre A, Carmody K, McDonald C, Moore J, Donne B, Mahony N.

Human Performance Laboratory, Anatomy Dept., Watts Building, Trinity College Dublin, Ireland.

Sleep deprivation is relevant for athletes for numerous reasons; travel, shift work and family commitments being some of the most common. Athletes are therefore occasionally required to compete in a sleep deprived state. Previous studies have demonstrated that a period of sleep deprivation can have negative effects on an athlete’s aerobic performance. However, the impact of sleep deprivation on an athlete’s skills performance has not been extensively researched. The aims of this study were to investigate if sleep deprivation had a negative effect on aerobic performance and if so, could these effects be negated by supplementation with caffeine. A group of male athletes (n=11) were sleep deprived (SD) for 24 hours on two occasions a minimum of one week apart. Each participant received a supplement of either placebo (Lactulose) or Caffeine (6mg/kg) one hour before testing on each day. Participants were also required to complete a non-sleep deprived (NSD) testing day where they received no supplement. The 11 participants were required to complete a modified version of the Hoff test and a YoYo Intermittent Recovery Test. The Modified Hoff is a soccer skills test around a circuit for 10 minutes. Blood lactate samples were taken pre and post Hoff test and pre and post YoYo IR1 test. The data collection phase has been completed and we are currently analysing our results.