KEANE, K., DOLAN, E., BURGESS, K., HOWATSON, G. and BERMANO, G. 2014. Impact of high intensity interval training (HIIT) and/or selenium (Se) supplementation on oxidative stress and antioxidant status in active females. Presented at the 19th European College of Sport Science (ECSS) annual congress 2014 (ECSS 2014): sport science around the canals, 02-05 July 2014, Amsterdam, The Netherlands.

## Impact of high intensity interval training (HIIT) and/or selenium (Se) supplementation on oxidative stress and antioxidant status in active females.

KEANE, K., DOLAN, E., BURGESS, K., HOWATSON, G. and BERMANO, G.

2014



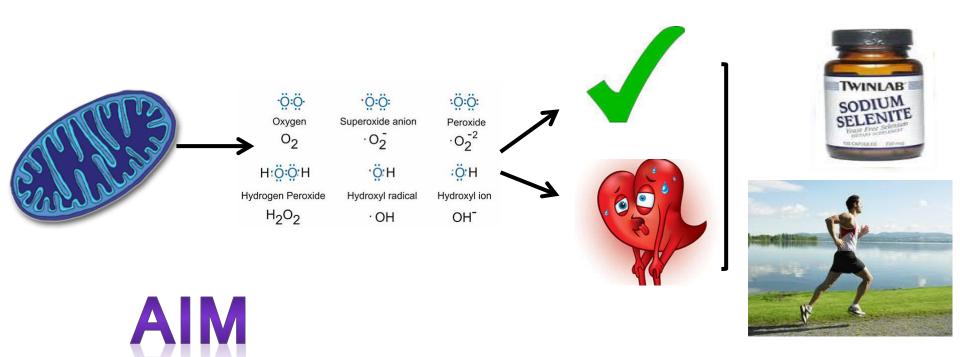
This document was downloaded from https://openair.rgu.ac.uk



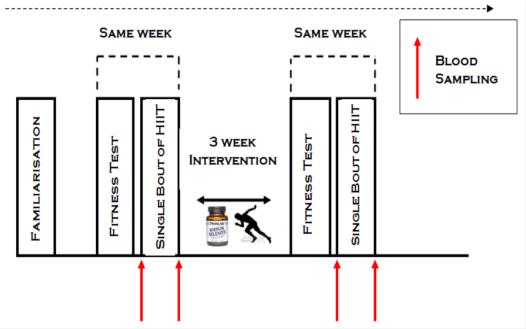
## Impact of HIIT and/or Selenium Supplementation on Oxidative Stress and Anti-Oxidant Status in Active Females

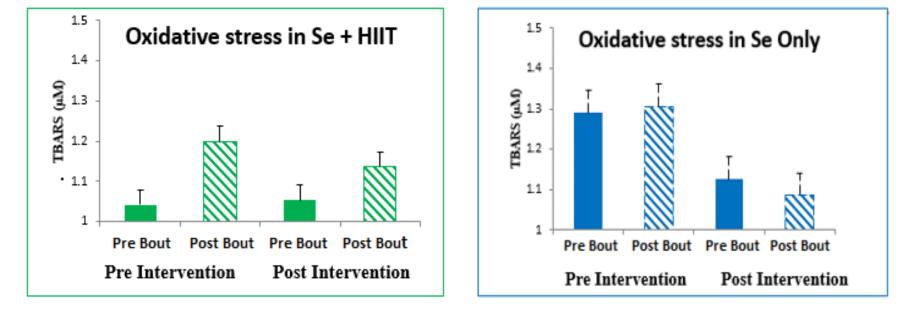
Keane, K.<sup>1</sup>, Dolan, E.<sup>2</sup>, Burgess, K.<sup>2</sup>, Howatson, G.<sup>1</sup> & Bermano, G.<sup>2</sup>

<sup>1</sup> Northumbria University <sup>2</sup> Robert Gordon University

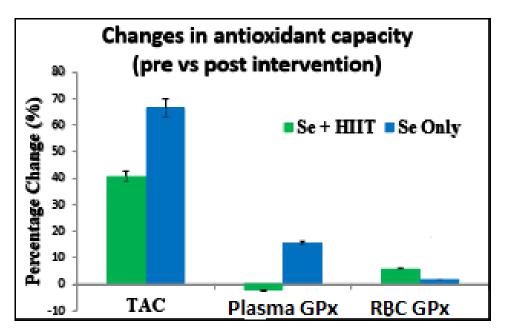


Evaluate the effect of HIIT and / or Se supplementation on exercise induced oxidative stress, antioxidant status and fitness levels in physically active females.



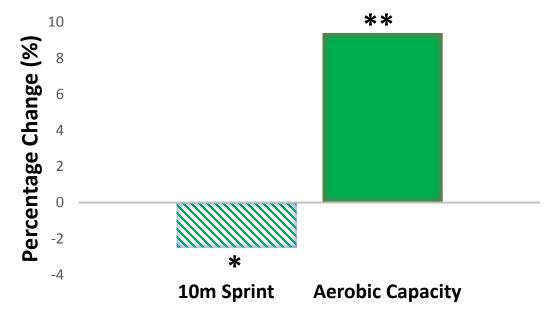


 HIIT training + Se supplementation or Se supplementation alone reduced oxidative stress response to a single bout of High Intensity Interval exercise



- Total Antioxidant capacity increased most after Se supplementation
- Plasma GPx activity increased after Se supplementation
- RBC GPx activity increased most after HIIT and Se intervention

## **Changes in Fitness Levels**



Whilst there were no significant differences, some trends were observed which highlights a potential benefit of Se (and possibly HIIT) in reducing oxidative stress and increasing antioxidant status post high intensity interval exercise in females engaged in intermittent sports.