Comments on Crosstalk 26: High intensity interval training does\slash does not have a role in risk reduction or treatment of disease. Personalised exercise – time to HIIT the right balance.

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**Personalised exercise – time to HIIT the right balance**

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**Comments**

This topical CrossTalk sparks important debate on the role for high intensity interval training (HIIT) in risk reduction and treatment of disease. Wisløff *et al.*, (2015) suggest HIIT appears highly effective at reducing disease risk. Furthermore, a recent meta-analysis highlights important benefits to cardio-metabolic health following HIIT (Jelleyman *et al.*, 2015), particularly in those at risk of or with type 2 diabetes (T2DM). Specifically, HIIT resulted in a superior reduction in insulin resistance and increase in $\dot{V}O_2$ max compared to continuous exercise and non-exercise control groups. In contrast to the point of Holloway and Spriet (2015), HIIT promotes improvements to cardiac structure and function, highlighting the potential of HIIT to reduce cardiac risk factors in clinical and pre-clinical populations. The feasibility of HIIT in a ‘real world’ context is often questioned. However, high rates of adherence to unsupervised training, without either preconditioning exercise or any adverse cardiac events, has been reported (Cassidy *et al.*, 2016). Similarly, high adherence rates to group cycling, which incorporates HIIT, led to marked improvements in cardio-metabolic health in overweight physically inactive individuals (Faulkner *et al.*, 2015).

Despite this evidence, the importance of alternative exercise activities cannot be ignored. For example, resistance-based exercise may provide additional benefits that would otherwise be missed if endurance exercise were performed in isolation (Shaw *et al.*, 2015). Therefore, we suggest that while HIIT elicits several health benefits, HIITing the intensity balance is critical in order to optimise personalised exercise interventions and benefit both individual and public health.

**Words:** 250 (250 max)

**References**


