Do not write off supramaximal exercise just yet

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Interestingly, this debate appears to write off supramaximal SIT as a feasible exercise intervention. Intuitively this seems reasonable, as performing the most commonly studied supramaximal SIT protocols, consisting of four to seven repeated all-out Wingate sprints, is highly fatiguing and requires strong motivation. However, a physiological justification for the design of these protocols is lacking, and several studies have demonstrated that performing SIT protocols incorporating shorter (10–20 s; Hazell et al. 2010; Metcalfe et al. 2012; Zelt et al. 2014) and/or fewer sprints (two to three; Metcalfe et al. 2012; Gillen et al. 2014) does not attenuate the associated health benefits. Importantly, protocols with fewer/shorter sprints are associated with substantially lower ratings of perceived exertion (Metcalfe et al. 2012), and only these protocols truly achieve the much-emphasised 'time-efficiency' of SIT and HIIT protocols. Despite decades of research demonstrating the benefits of aerobic exercise, the uptake of, and adherence to, such exercise remains low. Therefore, it is time to consider providing alternative/adjunct exercise regimes, alongside current recommendations, which address the common barriers to exercise participation. There is currently no experimental evidence suggesting that supramaximal SIT is unsafe and/or poorly adhered to, and dismissing out of hand this type of exercise as unsuitable for sedentary individuals, or indeed for patient populations, may result in a missed opportunity. The best exercise intervention is one that is both effective and adhered to, and for some people this could conceivably involve time-efficient supramaximal SIT.

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