

IMD17-0210: Is 'weekend only' physical activity enough to compensate for a sedentary lifestyle?

Reply by Gary O'Donovan, PhD<sup>1\*</sup> Mark Hamer, PhD<sup>1, 2</sup> and Emmanuel Stamatakis, PhD<sup>2, 3</sup>

*<sup>1</sup>School of Sport, Exercise and Health Sciences, National Centre for Sport & Exercise Medicine – East Midlands, Loughborough University, Loughborough, England. <sup>2</sup>Department of Epidemiology and Public Health, University College London, London, England. <sup>3</sup>Charles Perkins Centre, Prevention Research Collaboration, School of Public Health, University of Sydney, Sydney, Australia.*

\*Correspondence: Gary O'Donovan, PhD, School of Sport, Exercise and Health Sciences, National Centre for Sport & Exercise Medicine – East Midlands, Loughborough University, Loughborough LE11 3TU, United Kingdom. Email: [g.odonovan@lboro.ac.uk](mailto:g.odonovan@lboro.ac.uk)

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We thank Santos-Lozano and colleagues for their letter. They recognised that our study was important because it demonstrated the “tremendous potential” of leisure time physical activity to reduce mortality risk. Santos-Lozano and colleagues said that it would have been interesting if we were to have adjusted for “the sedentary lifestyle of western societies” and they raised the important question, is weekend physical activity enough? Sitting and other sedentary behaviours were investigated in the 2008 Health Survey for England, but not in other iterations of the Health Survey for England or the Scottish Health Survey. We have investigated the minimal physical activity dose for health benefits in the same cohort.<sup>1</sup> We did not observe a dose-response relationship between moderate- and vigorous-intensity physical activity and all-cause mortality risk in ‘insufficiently active weekend warriors’ who reported one or two sessions per week but did not meet physical activity guidelines of at least 150 minutes per week of moderate-intensity aerobic activity or at least 75 minutes per week of vigorous-intensity aerobic activity. We did observe a linear trend when investigating total physical activity of any intensity. We concluded that some of the health benefits might be explained by non-exercise activity, such as light-intensity walking. More than 40% of the weekend warriors were in desk-bound occupations and we would suggest that participation in sport and exercise at the weekend is enough to increase cardiorespiratory fitness and to reduce the mortality risk associated with the sedentary lifestyle of western societies.

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