Supplementary Figure S2: Absolute and relative intensity of physical activity accumulated across the day.

Intensity of the most active accumulated 1 [M1] to 720 minute bouts (12 hours) [M720] of free-living activity in absolute (mg, A) and relative (% maximum, B) terms. The red dashed circles show intensities indicative of specified absolute [A] and relative [B] intensities. The absolute moderate (3 METs [metabolic equivalents]) and vigorous (6 METs) intensities are taken from a calibration study as described [1,2,3]. Relative intensity is based on percentage of maximum acceleration. In this sample participation maximum acceleration approximated to 4 predicted VO2 reserve (VO2 _resting_). (Supplementary Figure S1). In relative terms, 40% of maximum VO2 reserve is indicative of moderate intensity and 60% of maximum VO2 reserve is indicative of vigorous intensity [4].

The intensity of the M1 during free-living physical activity relative to the intensity of the 1-minute SWT maximum indicates the extent to which the maximum intensity the individual can sustain in test conditions is accumulated across the day. It should be noted that the intensity of activity accumulated across the day includes very brief bursts of activity, thus will often be at a greater intensity than a patient’s functional maximum which refers to a continuous 1-min period at in the final stages of a maximal test.