## Supplemental Digital Content 2: Comparison of physical activity patterns between males and females

Males had a significantly higher average acceleration than females, but the intensity gradient did not differ (Table 1). Examination of the radar plots shows that, on average, both males and females accumulated 60 mins of physical activity equivalent to at least slow walking (1, Figure, raw plot - left panel), of which 15 min was brisk walking (2, Figure, raw plot - left panel) and 2 min vigorous physical activity (3, Figure, raw plot - left panel). The make-up of the greater volume of physical activity accumulated by males is shown most clearly on the standardised plot (4, Figure, standardised plot - right panel). It was accumulated predominantly via higher accelerations during the longer relatively inactive periods ( $\mathrm{M}^{1} / 3$ DAY, M120, M60, Figure, standardised plot - right panel) consisting mainly of pottering around (accelerations <70 mg, M1⁄3DAY and M120) and slow walking (accelerations up to around 100 $\mathrm{m} g$, M60). There was little difference between males and females for the most active 10-30 min of the day, but males had higher intensity vigorous physical activity for the most active $2-5 \mathrm{~min}$ of the day.

Figure. Physical activity profile by sex. Radar plot illustrating MX metrics for males and females for: raw MX metrics (left) and standardised MX metrics (right). Each plot shows (clockwise) the most active 8 h of the day ( $\mathrm{M}^{1 / 3 \text { DAY }}$ ), 120 minutes ( M 120 ), 60 minutes ( M 60 ), 30 minutes (M30), 15 minutes (M15), 10 minutes (M10), 5 minutes (M5) and 2 minutes (M2). As the MX metrics in plot $b$ are standardised within metric the mean $=0$ (dashed grey line) and standard deviation=1.


