Sensitivity analysis was conducted to compare the amount of daily sedentary behavior after removing sleep duration with two different methods: by a fixed period (23:00-8:00) and by data from accelerometer diary; and found a 3% inflation in sedentary behavior with the first method due to misclassification of sleep (highlighted in yellow, Table 3).

**Table 3.** Time spent in different intensities of physical activity and sedentary behaviour by removing fixed sleep time or individualized sleep time for each day (n=341)

| Protocol of removing sleep time | Fixed | Individualized | *P value |
|---|---|---|---|
| | Median (IQR) | Median (IQR) | |
| Average CPM | 1877 (755) | 2054 (864) | < 0.001 |
| % of time in SB (0-2302) | 67 (14) | 64 (15) | < 0.001 |
| % of time in intensity 2303-4999 | 21 (8) | 23 (9) | < 0.001 |
| % of time in intensity ≥ 5000 | 11 (10) | 13 (11) | 0.073 |

Physical activity and sedentary behaviour were calculated in vector magnitude from 05:00-24:00 (19hr)/day; **Fixed sleep time:** remove sleep time as 23:05-07:45; **Individualized sleep time:** by removing sleep time according to sleep log for each day.

*Independent sample t-test and Mann-Whitney U test.