# Detailed definitions of accelerometer cut-points, and step-based and walking cadence parameters

* Minute-by-minute acceleration count cut-points: sedentary (0-99 cts.min-1), light (100-760 cts.min-1), moderate activity (moderate-1: 760-1951 cts.min-1, moderate-2: 1952-5724 cts.min-1) and vigorous activity (≥5725 cts.min-1) [10, 11]
* Average daily ambulatory activity (steps.day-1): Sedentary: <5000 steps.day-1, Low active: 5000-7499 steps.day-1, Somewhat active: 7500-9999 steps.day-1, Active: ≥10 000 steps.day-1, and Very active: ≥12 500 steps.day-1 [12]
* Frequency of each bout duration, where bout duration ranges from 1 minute to ≥420 minutes with 1 minute increments
* Steps accumulated within each accelerometer count band: sedentary (0-99 cts.min-1), light (100-760 cts.min-1), moderate-1 activity (moderate-1: 760-1951 cts.min-1and moderate-2 to vigorous activity (≥1952 cts.min-1) [15]
* Steps accumulated within each walking bout, where bout duration ranges from 1 minute to ≥420 minutes with 1 minute increments
* Steps accumulated and time spent in each step cadence band (steps.min-1): 0 steps.min-1, 1-19 steps.min-1 (Incidental movement), 20-39 steps.min-1 (Sporadic movement), 40-59 steps.min-1 (Purposeful steps), steps.min-1 (Slow walking), 80-99 steps.min-1 (Medium walking), 100-119 steps.min-1 (Brisk walking), ≥120 steps.min-1 (Including all faster ambulation) [5]
* Bouted Steps: Steps accumulated for each average cadence within a continuous bout of steps, where bout duration ranges from 1 minute to ≥420 minutes with 1 minute increments
* Unbouted Steps: Steps accumulated at each minute-by-minute step cadence
* Longest walking bout (minutes), irrespective of step cadence
* Peak 1-minute cadence (steps/min) [5]
* Peak consecutive and non-consecutive 30-minute cadence (steps/min) [5]
* Number of bouts for ≥1-, ≥10-, 1-, 2-, 5- and 10- minutes, and the maximum bout duration (minutes) for a step cadence ≥100 steps.min-1 [5, 13, 14]
* *G* (Gini index) and S2 (within-subject variability): A higher S2 is indicative of a walking pattern utilizing a more varied choice of bout lengths or cadence. The Gini index (*G*) characterises how total steps are accumulated from different step bout lengths or cadences. *G* varies between 0 and 1. A high *G* (closer to 1) indicates that long walking bouts or higher cadences contribute more to the pattern of accumulation. A low *G* (closer to 0) indicates that the accumulation is more fragmented and that all walking bout lengths or cadences contribute equally to total steps [6, 7]