

Appendix 1. Characteristics of 24-hour physical behavior.

Behavior	SLEEP	PHYSICAL ACTIVITY	SEDENTARY BEHAVIOR
Definition	A naturally recurring and easily reversible state that is characterized by reduced or absent consciousness, perceptual disengagement, immobility, and the adoption of a characteristic sleeping posture	Any voluntary movement produced by skeletal muscles that results in energy expenditure	Any waking behavior characterized by an energy expenditure of 1.5 metabolic equivalents (METs; 1 MET = energy expenditure in rest), while in a sitting, reclining, or lying posture
Intensity category (Individual is sedentary or conducting LPA or MVPA – e.g. differentiated by MET-thresholds)	Sedentary (e.g., ~ 1 MET)	Sedentary, LPA, MVPA (e.g., ≥ 1 MET)	Sedentary (≤ 1.5 MET)
Body Posture and/or movement (postural location – e.g., differentiated by specific activity types)	Sitting, reclining, lying	Standing, cycling, walking running, wheelchair driving	Sitting, reclining, lying
Activity type	e.g., sleep at night, nap	e.g. vacuuming, commuting, driving a car	e.g. desk work, watching TV
Biological State (condition asleep or awake)	Asleep	Awake	Awake
Domain	At home, not at home	Work, home, leisure, transportation	Work, home, leisure, transportation
Bout Length	Short, moderate, Long	Short, moderate, Long	Short, moderate, Long
Outcomes (examples)	Sleep time, sleep-wake metrics, time awake	Energy expenditure, steps, time spent in different intensity categories, Time spent in standing or walking	Sedentary time, number of sedentary bouts