

Data Dictionary

Data are presented in a csv file labelled “foot_trait_and_physical_activity_data.csv”. Blank cells indicate no data were available. All variables represent “objective” measurements, unless indicated as “self-reported” by the participant.

subject_id: Unique ID number for each participant.

sex: Sex of participant (self-reported).

age: Age of participant in years (self-reported).

stature: Height of participant in centimeters.

body_mass: Body weight of participant in kilograms.

truncated_foot_length: Length of the foot between the heel and first metatarsal head in centimeters (a body size proxy).

arch_height_index: The arch height index (AHI) was calculated as the foot’s dorsum height at 50% of total foot length when the participant was standing divided by the distance between the heel and first metatarsal head.

static_arch_stiffness_index: The static arch stiffness index was calculated as $(\text{body mass} \times 0.4) / (\text{AHI}_{\text{seated}} - \text{AHI}_{\text{standing}})$.

dynamic_arch_stiffness_index: Dynamic arch stiffness was calculated by having participants walk barefoot at self-selected speeds across a force plate (see METHODS for details).

walking_speed: Walking speed in meters per second.

abductor_hallucis_csa: Cross-sectional area of abductor hallucis in squared centimeters.

flexor_digitorum_brevis_csa: Cross-sectional area of flexor digitorum brevis in squared centimeters.

abductor_digiti_minimi_csa: Cross-sectional area of abductor digiti minimi in squared centimeters.

mvpa_time_per_day: Average daily time spent in moderate-to-vigorous physical activity calculated from accelerometry data collected over 7-10 days (see METHODS for details).

daily_step_count: Average daily step count calculated from accelerometry data collected over 7-10 days (see METHODS for details).