Supplementary material to article by M. van Bloemendaal et al. "Concurrent validity and reliability of a lowcost gait analysis system for assessment of spatiotemporal gait parameters"

Table SI. Definitions of spatiotemporal gait parameters used in the analysis

Spatiotemporal gait parameter	Definition spatiotemporal gait analysis system	Definition GAITRite® system
Step length, cm	Distance from the most distal point of the heel strike of the first foot (0% of the gait cycle) to the most distal point of the heel strike of the opposite foot (0% of the next gait cycle)	Line of progression from the heel centre of the current footprint to the heel centre of the previous footprint on the opposite foot
Step length at toe walking, cm	Distance from the most distal point of the hallux of the first foot completely on the ground to the most distal point of the hallux of the opposite foot completely on the ground	Line of progression from the toe base of the current footprint to the toe base of the previous footprint on the opposite foot (gait pattern toe base measurement)
Step time, s	Time elapsed between the first moment of contact with the ground of the first foot (0% of the gait cycle) to the first moment of contact with the ground of the opposite foot (0% of the next gait cycle)	Time elapsed from first contact of 1 foot to first contact of the opposite foot
Stance time, s	Time elapsed between the first moment of contact with the ground (initial contact) to the last moment of contact with the ground of 1 foot (toe off)	Time elapsed between the first contact and the last contact of 2 consecutive footfalls on the same foot
Double support time, s	Time elapsed between the first moment of both feet in contact with the ground to the very last moment of contact of 1 of both feet with the ground (toe off)	d From opposite footfall heel strike to support footfall toe-off (unloading/terminal double support)
Swing time, s	Time elapsed between the last moment of contact with the ground (toe off) to the first moment of contact with the ground (initial contact) of 1 foot	Time elapsed between the last contact of the current footfall to the first contact of the next footfall on the same foot
Stride length, cm	Distance from the most distal point of the heel strike of the first foot to the most distal point of the next heel strike of the same foot	Line of progression between the heel points of 2 consecutive footprints of the same foot
Stride time, s	Time elapsed between the first moment of contact with the ground of the first foot to the next first moment of contact with the ground of the same foot	Time elapsed between the first contacts of 2 consecutive footfalls of the same foot