

Supplementary Table 1 Quality of standing balance, represented by Center of Pressure parameters, in young and old participants in several standing positions with eyes open

	Side-by-side			One leg			Semi-tandem			Tandem		
	Young	Old	p	Young	Old	p	Young	Old	p	Young	Old	p
<i>Anterior-Posterior direction</i>												
Mean amplitude (cm)	0.39 (0.02)	0.45 (0.02)	.007	0.64 (0.03)	0.67 (0.02)	.59	0.40 (0.03)	0.45 (0.03)	.29	0.48 (0.03)	0.63 (0.03)	.008
Mean velocity (cm/s)	6.34 (0.19)	6.35 (0.14)	.79	6.79 (0.19)	7.82 (0.17)	.001	6.32 (0.18)	6.52 (0.14)	.25	6.91 (0.19)	7.57 (0.14)	.005
Amplitude variability (cm)	0.48 (0.03)	0.56 (0.02)	.005	0.79 (0.04)	0.85 (0.02)	.31	0.50 (0.03)	0.56 (0.03)	.18	0.58 (0.03)	0.80 (0.04)	.001
Velocity variability (cm/s)	8.76 (0.24)	8.75 (0.19)	.74	9.31 (0.25)	10.55 (0.22)	.002	8.73 (0.23)	8.98 (0.19)	.24	9.39 (0.24)	10.20 (0.19)	.006
Range (cm)	2.49 (0.11)	2.84 (0.09)	.002	4.15 (0.19)	4.92 (0.14)	.004	2.61 (0.15)	3.14 (0.20)	.06	3.18 (0.15)	4.84 (0.23)	<.001
Mean frequency (Hz)	3.11 (0.13)	2.80 (0.12)	.02	2.04 (0.10)	2.14 (0.06)	.81	3.10 (0.16)	3.03 (0.16)	.54	2.83 (0.16)	2.43 (0.10)	.03
<i>Medial-Lateral direction</i>												
Mean amplitude (cm)	0.31 (0.01)	0.38 (0.01)	<.001	0.41 (0.01)	0.59 (0.02)	<.001	0.41 (0.02)	0.47 (0.02)	.008	0.40 (0.02)	0.60 (0.02)	<.001
Mean velocity (cm/s)	4.22 (0.12)	4.43 (0.08)	.11	4.89 (0.13)	6.42 (0.14)	<.001	4.28 (0.12)	4.80 (0.08)	<.001	4.58 (0.11)	6.00 (0.13)	<.001
Amplitude variability (cm)	0.38 (0.02)	0.47 (0.01)	<.001	0.51 (0.02)	0.73 (0.02)	<.001	0.51 (0.02)	0.60 (0.02)	.002	0.48 (0.01)	0.74 (0.02)	<.001
Velocity variability (cm/s)	5.56 (0.15)	5.83 (0.10)	.06	6.50 (0.17)	8.58 (0.18)	<.001	5.62 (0.15)	6.38 (0.11)	<.001	6.17 (0.15)	8.07 (0.17)	<.001
Range (cm)	2.06 (0.07)	2.52 (0.07)	<.001	2.80 (0.08)	3.74 (0.12)	<.001	2.63 (0.10)	3.43 (0.14)	<.001	2.72 (0.10)	3.89 (0.11)	<.001

Mean frequency (Hz)	2.64 (0.12)	2.24 (0.08)	<.001	2.19 (0.07)	1.98 (0.05)	.001	1.93 (0.09)	1.92 (0.06)	.55	2.15 (0.09)	1.85 (0.05)	<.001
<i>CoP path</i>												
Sway area (ellipse) (cm/s)	0.11 (0.01)	0.16 (0.01)	<.001	0.25 (0.02)	0.39 (0.02)	<.001	0.15 (0.01)	0.22 (0.02)	.02	0.17 (0.01)	0.38 (0.02)	<.001
Sway area (circle) (cm/s)	0.24 (0.02)	0.35 (0.02)	<.001	0.64 (0.07)	0.94 (0.07)	.05	0.32 (0.03)	0.63 (0.14)	.09	0.44 (0.04)	1.00 (0.10)	.001
Eccentricity	0.74 (0.02)	0.71 (0.01)	.01	0.76 (0.02)	0.64 (0.02)	<.001	0.80 (0.02)	0.71 (0.01)	.001	0.68 (0.02)	0.69 (0.02)	>.99

Data are given in mean and standard error for all successful completed trials. p = p-value adjusted for gender, height and weight. Bold indicates significant p-values (< 0.002).

Supplementary Table 2 Quality of standing balance, represented by Center of Pressure parameters, in young and old participants in several standing positions with eyes closed

	Side-by-side			One leg			Semi-tandem			Tandem		
	Young	Old	p	Young	Old	p	Young	Old	p	Young	Old	p
<i>Anterior-Posterior direction</i>												
Mean amplitude (cm)	0.56 (0.03)	0.61 (0.02)	.10	0.95 (0.05)	n.a.	n.a.	0.62 (0.04)	0.76 (0.03)	.005	0.93 (0.09)	0.83 (0.08)	.78
Mean velocity (cm/s)	6.60 (0.19)	7.09 (0.15)	.03	8.30 (0.19)	n.a.	n.a.	6.80 (0.19)	8.21 (0.20)	<.001	8.05 (0.22)	9.01 (1.05)	.05
Amplitude variability (cm)	0.69 (0.04)	0.77 (0.03)	.05	1.21 (0.06)	n.a.	n.a.	0.77 (0.04)	0.97 (0.04)	.001	1.16 (0.10)	1.12 (0.10)	.82
Velocity variability (cm/s)	9.02 (0.26)	9.63 (0.20)	.02	11.67 (0.29)	n.a.	n.a.	9.25 (0.25)	11.15 (0.28)	<.001	11.13 (0.50)	12.47 (1.45)	.09
Range (cm)	3.54 (0.17)	4.36 (0.15)	.001	7.28 (0.47)	n.a.	n.a.	4.18 (0.20)	6.00 (0.31)	<.001	6.91 (0.83)	8.14 (1.21)	.12
Mean frequency (Hz)	2.36 (0.13)	2.25 (0.09)	.22	1.59 (0.07)	n.a.	n.a.	2.14 (0.12)	2.04 (0.07)	.16	1.82 (0.14)	1.97 (0.23)	.90
<i>Medial-Lateral direction</i>												
Mean amplitude (cm)	0.53 (0.03)	0.67 (0.02)	<.001	0.89 (0.03)	n.a.	n.a.	0.75 (0.03)	1.08 (0.04)	<.001	0.93 (0.03)	1.22 (0.02)	<.001
Mean velocity (cm/s)	4.56 (0.14)	5.53 (0.11)	<.001	7.17 (0.26)	n.a.	n.a.	5.13 (0.13)	7.93 (0.24)	<.001	6.64 (0.17)	8.68 (0.59)	<.001
Amplitude variability (cm)	0.66 (0.03)	0.85 (0.02)	<.001	1.08 (0.03)	n.a.	n.a.	0.94 (0.04)	1.34 (0.05)	<.001	1.14 (0.04)	1.49 (0.03)	<.001
Velocity variability (cm/s)	6.06 (0.18)	7.43 (0.15)	<.001	9.71 (0.33)	n.a.	n.a.	6.85 (0.18)	10.83 (0.35)	<.001	9.18 (0.24)	11.95 (0.74)	<.001
Range (cm)	3.60 (0.18)	4.70 (0.15)	<.001	5.16 (0.17)	n.a.	n.a.	5.02 (0.19)	7.01 (0.22)	<.001	5.49 (0.16)	7.24 (0.46)	<.001

Mean frequency (Hz)	1.65 (0.07)	1.54 (0.04)	.02	1.45 (0.05)	n.a.	n.a.	1.27 (0.06)	1.33 (0.03)	.79	1.30 (0.05)	1.26 (0.09)	.34
<i>CoP path</i>												
Sway area (ellipse) (cm/s)	0.29 (0.03)	0.42 (0.03)	.001	0.83 (0.06)	n.a.	n.a.	0.44 (0.04)	0.84 (0.06)	<.001	0.85 (0.10)	1.03 (0.08)	.21
Sway area (circle) (cm/s)	0.61 (0.06)	0.97 (0.06)	.001	1.95 (0.28)	n.a.	n.a.	1.01 (0.08)	2.07 (0.20)	<.001	2.33 (0.74)	3.54 (1.24)	.12
Eccentricity	0.68 (0.02)	0.62 (0.01)	.01	0.59 (0.03)	n.a.	n.a.	0.76 (0.02)	0.75 (0.01)	.77	0.68 (0.02)	0.67 (0.07)	.96

Data are given in mean and standard error for all successful completed trials. p = p-value adjusted for gender, height and weight. Bold indicates significant p-values (< 0.002).