

Supplementary Material

Table S1.

Participant characteristics - differences between protocols by sex of the participants (t-test for independent samples was used when normality of the data was confirmed by Shapiro-Wilk test; † – Mann-Whitney test was used if the data were not normally distributed; * p< 0.05)

	Men			Women		
	Supine	Upright	p	Supine	Upright	p
N (%)	28 (40.1)	41 (49.9)	-	28 (40.0)	42 (60.0)	-
Median Age, years (min – max) †	20.5 (18.0 – 66.0)	30.0 (18.0 – 58.0)	0.267	22.5 (18.0 – 62.0)	22.5 (19.0 – 59.0)	0.894
Mean Height, meters (SD)	1.8 (0.1)	1.8 (0.1)	0.020*	1.6 (0.1)	1.6 (0.1)	0.391
Mean Weight, kg (SD)	76.1 (10.0)	74.6 (9.5)	0.518	60.5 (9.1)	62.8 (12.1)	0.435
Mean BMI, kg/m ² (SD)	23.9 (2.9)	24.4 (2.3)	0.398	22.9 (3.3)	23.3 (4.4)	0.691
Mean SYS (SD)	118.9 (11.2)	122.0 (14.1)	0.233	113.8 (13.9)	118.3 (11.4)	0.084
Mean DIA (SD)	74.4 (9.2)	71.4 (7.9)	0.156	74.4 (7.3)	71.6 (10.7)	0.270
Median ABI (min – max) †	1.1 (1.0– 1.3)	1.1 (1.0– 1.8)	0.878	1.1 (1.0 – 1.3)	1.0 (0.9 – 1.4)	0.083

Table S2.

Participant characteristics - differences between men and women according to the protocol at baseline († -t-test for independent samples was used when normality of the data was confirmed by Shapiro-Wilk test; ∞ – Mann-Whitney test was used if the data were not normally distributed)

	Supine			Upright		
	Men	Women	p	Men	Women	p
N (%)	28 (50)	28 (50)	-	41 (49.4)	42 (50.6)	-
Median Age, years (min – max)	20.5 (18.0 – 66.0)	22.5 (18.0 – 62.0)	0.405 [∞]	30.0 (18.0 – 58.0)	22.5 (19.0 – 59.0)	0.132 [∞]
Mean Height, meters (SD)	1.8 (0.1)	1.6 (0.1)	<0.001 †	1.8 (0.1)	1.6 (0.1)	<0.001 †
Mean Weight, kg (SD)	76.1 (10.0)	60.5 (9.1)	<0.001 †	74.6 (9.5)	62.7 (12.1)	<0.001 †
Mean BMI, kg/m ² (SD)	23.9 (2.9)	22.9 (3.3)	0.223†	24.4 (2.3)	23.3 (4.4)	0.136†
Mean SYS (SD)	118.2 (11.2)	113.8 (13.9)	0.124†	122.0 (14.1)	118.3 (11.4)	0.184†
Mean DIA (SD)	74.4 (9.2)	74.4 (7.3)	0.918†	71.4 (7.9)	71.6 (10.7)	0.932†
Median ABI (min – max)	1.1 (1.0– 1.3)	1.1 (1.0 – 1.3)	0.958 [∞]	1.1 (1.0 – 1.8)	1.0 (0.9 – 1.4.)	0.104 [∞]

Table S3.

Perfusion differences between right and left limbs obtained in baseline and recovery phases of the experimental protocols. Results are shown by sex considering body position (supine or upright). Results are expressed as median (Q1-Q3) LDF Values expressed in BPU (blood perfusion units). Statistical differences were assessed by the Wilcoxon signed rank test; * $p < 0.05$)

		Baseline			Recovery		
		Right foot, (Q1-Q3)	Left foot, (Q1-Q3)	p	Right foot, (Q1-Q3)	Left foot, (Q1-Q3)	p
Men	Supine	10.1 (6.7 - 15.6)	9.6 (5.1 - 17.0)	0.616	9.5 (5.9 - 15.1)	7.9 (4.8 - 19.2)	0.641
	Upright	9.4 (7.3 - 11.6)	9.5 (6.5 - 13.0)	0.946	8.4 (6.4 - 11.2)	8.8 (6.1 - 13.6)	0.219
Women	Supine	6.3 (3.9 - 9.3)	6.5 (4.9 - 10.3)	0.943	6.4 (3.7 - 10.9)	6.2 (4.6 - 10.5)	0.516
	Upright	8.5 (7.0 - 11.1)	8.1 (6.2 - 11.0)	0.914	8.9 (6.8 - 11.0)	8.2 (6.1 - 10.8)	0.554

Table S4.

Differences of LDF perfusion values, expressed in blood perfusion units (BPU), detected in baseline and recovery phases of experimental protocols by sex considering body position (supine or upright). Statistical differences were assessed by the Mann-Whitney test. (* $p < 0.05$). r thresholds for effect size of 0.1, 0.3, and 0.5 for small, medium, and large effect sizes, respectively.

Median values of LDF (Q1-Q3)		Supine				Upright			
		Men	Women	p	r	Men	Women	P	r
BASELINE	Right foot	10.1 (6.7 - 15.5)	6.3 (3.9 - 9.3)	0.007*	0.630	9.4 (7.3 - 11.6)	8.5 (7.0 - 11.0)	0.349	0.075
	Left foot	9.6 (5.1 - 17.0)	6.5 (4.9 - 10.3)	0.063	1.241	9.5 (6.5 - 13.0)	8.1 (6.2 - 11.0)	0.252	0.245
	Dominant foot	11.0 (7.6 - 18.3)	7.4 (6.0 - 11.7)	0.026*	0.839	11.3 (7.4 - 13.7)	9.5 (7.4 - 11.9)	0.179	0.345
	Contralateral foot	9.1 (4.7 - 12.8)	5.7 (3.4 - 6.6)	0.017*	0.976	8.8 (6.1 - 10.1)	7.5 (5.8 - 9.0)	0.239	0.031
	Dominant/Contralateral ratio % (Q1-Q3)	39.1 (15.2 - 65.9)	50.5 (20.0 - 104.3)	0.334	0.018	23.1 (11.7 - 40.4)	14.3 (7.8 - 46.1)	0.510	0.007
RECOVERY	Right foot	9.5 (5.9 - 15.1)	6.4 (3.7 - 10.9)	0.017*	0.730	8.4 (6.4 - 11.2)	8.9 (6.8 - 11.0)	0.922	0.133
	Left foot	7.9 (4.8 - 19.2)	6.2 (4.6 - 10.5)	0.149	0.636	8.8 (6.1 - 13.6)	8.2 (6.1 - 10.8)	0.439	0.186
	Dominant foot	12.0 (6.5 - 19.2)	7.5 (5.5 - 12.5)	0.035*	0.738	11.0 (7.7 - 15.0)	9.8 (7.9 - 11.8)	0.297	0.164
	Contralateral foot	7.5 (4.1 - 14.4)	5.4 (3.4 - 9.1)	0.062	0.605	6.4 (5.6 - 9.8)	6.9 (5.5 - 8.6)	0.856	0.113
	Dominant/Contralateral ratio % (Q1-Q3)	36.5 (14.4 - 64.6)	38.4 (14.3 - 69.8)	0.928	0.110	32.3 (18.7 - 63.7)	23.8 (9.2 - 61.3)	0.241	0.352

Table S5.

Differences of LDF perfusion values expressed in blood perfusion units (BPU) detected in baseline and recovery phases of experimental protocols by body position (supine or upright) in men and women. Statistical differences were assessed by the Mann-Whitney test. (* $p < 0.05$). r thresholds for effect size of 0.1, 0.3, and 0.5 for small, medium, and large effect sizes, respectively.

Median values of LDF (Q1-Q3)		MEN				WOMEN			
		Supine	Upright	p	r	Supine	Upright	p	r
BASELINE	Right foot	10.1 (6.7 – 15.5)	9.4 (7.3 – 11.6)	0.347	0.923	6.3 (3.9 – 9.3)	8.5 (7.0 – 11.0)	0.016*	0.462
	Left foot	9.7 (5.1 – 17.0)	9.5 (6.5 – 13.0)	0.951	1.433	6.5 (4.9 – 10.3)	8.1 (6.2 – 11.0)	0.048*	0.002
	Dominant foot	11.0 (7.6 – 18.3)	11.3 (7.4 – 13.7)	0.566	1.149	7.4 (6.0 – 11.7)	9.5 (7.4 – 11.9)	0.112	0.498
	Contralateral foot	9.1 (4.7 – 12.8)	8.8 (6.1 – 10.1)	0.826	1.178	5.7 (3.4 – 6.6)	7.5 (5.8 – 9.0)	0.003*	0.023
	Dominant/Contralateral ratio % (Q1-Q3)	39.1 (15.2 – 65.8)	23.1 (11.7 – 40.4)	0.107	0.247	50.5 (20.0 – 104.3)	14.3 (7.8 – 46.1)	0.009*	0.931
RECOVERY	Right foot	9.5 (5.9 – 15.1)	8.4 (6.4 – 11.2)	0.313	1.199	6.4 (3.7 – 11.0)	8.9 (6.8 – 11.0)	0.013*	0.804
	Left foot	7.9 (4.8 – 19.2)	8.8 (6.1 – 13.6)	0.835	0.955	6.2 (4.6 – 10.5)	8.2 (6.1 – 10.8)	0.095	0.306
	Dominant foot	12.0 (6.5 – 19.2)	11.0 (7.7 – 15.0)	0.647	1.213	7.5 (5.5 – 12.5)	9.8 (7.9 – 11.8)	0.044*	0.685
	Contralateral foot	7.5 (4.1 – 14.4)	6.4 (5.6 – 9.8)	0.578	0.994	5.4 (3.4 – 9.1)	6.9 (5.5 – 8.6)	0.010*	0.654
	Dominant/Contralateral ratio % (Q1-Q3)	36.5 (14.4 – 64.6)	32.3 (18.6 – 63.6)	0.971	0.006	38.4 (14.3 – 69.8)	23.8 (9.2 – 61.3)	0.277	0.050