

1 **Supplementary material:** The effect of mat Pilates training combined with aerobic exercise versus
2 mat Pilates training alone on blood pressure in hypertensive women: A randomized controlled
3 trial

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5 Anthropometry, clinical blood pressure and heart rate, autonomic activity, quality of life, strength,
6 flexibility, and functional tasks, and cardiorespiratory fitness

7 The results of these outcome measures are presented in **Table 4**.

8 All tests were performed in 60 hypertensive women, following application of the inclusion
9 and exclusion criteria of the study. The tests were performed at baseline and follow up. Baseline
10 was assessed before the 16-week intervention and follow up assessed 48 hours after the last
11 intervention session. The evaluation consisted of three meetings that occurred on different visits
12 to the laboratory.

13 Anthropometry

14 Bodyweight (kg) was measured using a calibrated digital scale (Welmy, W300 model,
15 Brazil), height (m) using a stadiometer (Sanny®, Brazil), and the body mass index was calculated
16 as the weight (kg) divided by height squared (m²). The waist and hip circumferences were
17 measured using an anthropometric tape (Sanny®, Brazil), at the average distance between the last
18 floating rib and the iliac crest and the largest perimeter of the gluteal region, respectively. The
19 waist-to-hip and waist-to-height ratio were calculated using the following formulas: waist (cm) /
20 hip (cm) and waist (cm) / height (cm), respectively.

21 Clinical blood pressure and heart rate

22 The clinical blood pressure (BP) evaluation was performed using an automatic arm BP
23 monitor (Microlife®, BPA100 model, Switzerland) and heart rate (HR) was monitored using an
24 HR monitor (Polar®, FT1 model, Finland). The participant remained seated on a chair with a

25 backrest, feet resting on a flat surface. The arm band was positioned on the dominant upper limb,
26 2 to 3 cm above the cubital fossa, with the compressive part in the direction of the brachial artery,
27 at the heart level, resting on a firm surface. Systolic blood pressure (SBP), diastolic blood pressure
28 (DBP), mean blood pressure (MBP) (mmHg), and double product (DP) were measured three times
29 with an interval of 1 minute between measurements after the participant had remained at rest for
30 10 minutes. HR was monitored during rest, together with the clinical measurement of BP. The DP
31 variable was estimated by multiplying SBP by HR (bpm X mmHg).

32 Autonomic activity

33 To assess the R-R intervals (iR-R), an HR monitor (Polar®, RS800cx model, Finland) was
34 applied. The iR-R were recorded in sequence during 30 minutes in the supine position (Pre-
35 postural adjustment period), 10 minutes in the orthostatic position (Postural adjustment period),
36 and 30 minutes in the supine position (Post-postural adjustment period). The analysis of Heart
37 Rate Variability (HRV) was performed by linear methods, analyzed in the time and frequency
38 domains and by nonlinear methods. Data corresponding to a 5-minute window were recorded and
39 downloaded for analysis using specific software (Polar Precision Performance, Polar). HRV
40 indices were analyzed using Kubios HRV software (Biomedical Signal Analysis Group,
41 Department of Applied Physics, Finland),¹ considering the last 5 minutes of recording extracted
42 from each period analyzed. In the time domain, the following indices were obtained: mean iR-R
43 (R-Rmean), squared root of the mean squared differences of successive iR-R (rMSSD), and
44 standard deviation (SD) of normal iR-R (SDNN) expressed in milliseconds (ms). In the frequency
45 domain, bands corresponding to low-frequency spectral components and high-frequency spectral
46 components were analyzed in normalized units (LFn.u. and HFn.u., respectively). For the analysis

47 of HRV by nonlinear methods, the SD of instantaneous iR-R (SD1) and the continuous long-term
48 iR-R variability (SD2) were used, expressed in ms.

49 Quality of life

50 For the analysis of quality of life (QOL), the World Health Organization Quality of
51 Life/Bref (WHOQOL-bref) questionnaire was used, which allows the participant to self-assess,
52 based on their perceptions. The WHOQOL-bref contains 26 questions that involve different
53 aspects of everyday life and address four domains of QOL: physical, psychological,
54 environmental, and social relations. For each aspect, the participant can present their answer
55 through scores ranging from one to five, with one representing the worst condition and five the
56 best condition. The average score in each domain indicates the participant's perception of their
57 satisfaction in each aspect of their life, relating to their QOL.²

58 Strength, flexibility, and functional tasks

59 Flexibility of the lower back and hamstring muscles was measured by the sit and reach test
60 (Sanny®, Brazil). The movement was performed three times with an interval of one minute
61 between attempts, and the highest value (cm) reached was considered for analysis.³ Handgrip
62 strength, expressed in kilograms-force, was measured using a hand dynamometer (Jamar®, United
63 Kingdom). The participant remained seated in a chair, with the spine erect, hips and knees at 90°,
64 shoulder in an adducted position near the trunk, and elbow at 90°. The participant was instructed
65 to perform the maximum isometric contraction movement of the flexor muscles of the fingers in
66 both hands. The movement was performed three times with an interval of one minute between
67 attempts, and the highest value reached was considered for the analysis. The tests of velocity to
68 move from a sitting to standing position (VST), from a supine to standing position (VSP), and to
69 put on sneakers and tie the laces (VPS) were performed according to the protocol established by

70 Raso.⁴ The time spent, in seconds, was measured using a stopwatch. Three attempts of the VST
71 and VSP tests were performed, with an interval of one minute between them and the lowest value
72 was considered for the analysis. The VPS test was performed only once.⁴

73 Cardiorespiratory fitness

74 The cardiorespiratory exercise test was performed on a treadmill (Inbramed, Super ATL
75 model, Brazil) with gas analysis (MGC Diagnostics®, Vo2000™ model, United States) and
76 electrocardiographic analysis (Micromed, Wincardio model, Brazil) using Ergo PC Elite software,
77 in order to identify the first ventilatory threshold (VT1), second ventilatory threshold (VT2), and
78 cardiorespiratory fitness. The test was composed of increasing loads, with speeds from 3.0 km/h
79 to 6.0 km/h and inclinations of 4% to 14%, without pauses between stages, until the participant's
80 exhaustion.⁵ The initial procedures consisted of clinical and electrocardiographic assessments at
81 rest. During the exam, minute ventilation, oxygen uptake, and carbon dioxide output were acquired
82 breath-by-breath and averaged over 10-second intervals. Subjective perceived effort and BP were
83 measured continuously every 3 minutes. Before starting the test, the participants were instructed
84 to stop the effort when reaching maximum exhaustion. The following criteria were adopted as the
85 maximum test: HR above 85% of the maximum predicted HR and respiratory exchange ratio >
86 1.10.⁶ The test was also interrupted if the participant manifested electrocardiographic
87 abnormalities or abnormal BP response at the discretion of the cardiologist responsible for the
88 examination.

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93 Table 4. Mean (SD) at baseline and follow-up, within-group change (95% CI) as raw and standardized values, and between-group difference (95% CI) as raw
 94 and standardized values for secondary outcomes.

	Within-group difference (Follow up minus Baseline)						Between-group difference at follow up					
	CG (n=20)		MP (n=20)		MP+AE (n=20)		CG (n=20)	MP (n=20)	MP+AE (n=20)	CG vs MP	MP vs MP+AE	CG vs MP+AE
	BaselineMean (SD)	Follow upMean (SD)	BaselineMean (SD)	Follow upMean (SD)	BaselineMean (SD)	Follow upMean (SD)	Meandifference (95% CI)	Meandifference (95% CI)	Meandifference (95% CI)	Meandifference (95% CI)	Meandifference (95% CI)	Meandifference (95% CI)
<i>SecondaryOutcomes</i>												
<i>Anthropometric data</i>												
Bodymass (kg)	79.9 (16.7)	78.7 (12.6)	78.1 (20.3)	75.8 (17.1)	74.3 (16.6)	70.3 (12.7)	-1.2 (-5.9 to 3.5)	-2.3 (-7.9 to 3.2)	-4 (-9.6 to 1.4)	2.9 (-10.5 to 16.4)	5.5 (-5.6 to 16.7)	8.4 (-3.4 to 20.3)
Height (cm)	158.6 (7.3)	158.4 (7.2)	160.9 (4.7)	161.1 (4.9)	157.4 (6.4)	157.9 (6.1)	-0.2 (-0.5 to 0.9)	0.2 (-0.3 to 0.7)	0.5 (0.0 to 0.8)	-2.7 (-7.6 to 2.2)	3.2 (-1.4 to 7.8)	0.5 (-4.9 to 5.9)
BMI (kg/m ²)	31.6 (5.7)	31.2 (3.8)	30.0 (7.3)	29.1 (5.9)	29.9 (5.6)	28.2 (5.0)	-0.4 (-2.2 to 1.5)	-0.9 (-3.1 to 1.2)	-1.7 (-3.5 to 0.2)	2.1 (-2.4 to 6.8)	0.8 (-3.1 to 4.8)	3.0 (-1.3 to 7.4)
WC (cm)	97.1 (7.0)	94.2 (8.1)	90.3 (12.2)	90.5 (11.9)	93.4 (12.8)	90.5 (11.2)	-2.9 (-4.9 to -0.7)	0.2 (-2.5 to 2.9)	-2.9 (-4.8 to -0.8)	3.7 (-5.3 to 12.7)	0 (-8.3 to 8.2)	3.6 (-5.5 to 12.8)
HC (cm)	111.0 (11.3)	110.7 (10.9)	109.6 (15.3)	108.3 (16.6)	103.9 (13.7)	105.3 (13.2)	-0.3 (-2.0 to 1.6)	-1.3 (-3.9 to 1.3)	1.4 (-0.9 to 3.7)	2.4 (-7.2 to 12.0)	3.0 (-9.8 to 15.9)	5.4 (-5.9 to 16.8)
Waist-to-hip ratio (cm)	0.88 (0.07)	0.85 (0.08)	0.82 (0.07)	0.83 (0.07)	0.90 (0.07)	0.86 (0.07)	-0.03 (-0.04 to - 0.001)	0.01 (-0.01 to 0.03)	-0.04 (-0.06 to - 0.01)	0.02 (-0.04 to 0.07)	-0.03 (-0.08 to 0.03)	-0.01 (-0.07 to 0.05)
Waist-to-height ratio(cm)	0.61 (0.05)	0.59 (0.05)	0.56 (0.07)	0.56 (0.07)	0.59 (0.07)	0.57 (0.06)	-0.02 (-0.03 to - 0.004)	0 (-0.01 to 0.01)	-0.02 (-0.03 to - 0.008)	0.03 (-0.02 to 0.09)	-0.01 (-0.06 to 0.03)	0.02 (-0.02 to 0.07)

Clinical blood pressure and heart rate

SBP (mmHg)	118.5 (7.4)	118.4 (8.7)	117.7 (8.4)	115.6 (9.1)	122.2 (10.5)	114.7 (10.6)	-0.1 (-3.6 to 3.4)	-2.1 (-7.9 to 3.7)	-7.5 (-13.7 to -1)	2.8 (-5.7 to 11.3)	0.8 (-6.8 to 8.4)	3.6 (-3 to 10.2)
DBP (mmHg)	76.3 (10.5)	78.5 (9.2)	76.4 (6.9)	76.1 (7.7)	76.9 (9.1)	76.3 (7.4)	2.2 (-2.6 to 7)	-0.3 (-5.1 to 4.4)	-0.6 (-4.7 to 3.6)	2.4 (-5 to 9.8)	-0.2 (-7.1 to 6.6)	2.1 (-5.9 to 10.2)
MBP (mmHg)	90.4 (7.6)	90.3 (7.0)	90.2 (6.6)	89.5 (5.4)	92.0 (8.4)	89.5 (7.8)	-0.1 (-1.2 to 1.1)	-0.7 (-2.6 to 1.2)	-2.5 (-4.5 to -0.3)	0.8 (-4.7 to 6.4)	0 (-6.0 to 5.8)	0.8 (-4.8 to 6.4)
HR (bpm)	70.9 (8.1)	70.6 (6.5)	71.2 (12.6)	67.1 (12.3)	68.7 (8.6)	67.1 (7.6)	-0.3 (-3.8 to 3.3)	-4.1 (-8.7 to 0.5)	-1.6 (-4.4 to 1.3)	3.5 (-5.1 to 12.2)	-0 (-8.7 to 8.6)	3.5 (-1.2 to 8.2)
DP (bpm X mmHg)	8386.5 (893.1)	8358.6 (892.3)	8356.6 (1353.9)	7794.1 (1722.2)	8403.2 (1353.0)	7700.3 (1059.0)	-27.9 (-528.7 to 472.8)	-562.5 (-1274.5 to 149.5)	-702.9 (-1368.1 to -37.6)	564.5 (-645.9 to 1774.9)	93.7 (-1149.1 to 1336.7)	658.3 (-57.4 to 1374)

*Data of heart rate variability indices**Pre-postural adjustment*

R-R interval (ms)	856.4 (100.8)	856.4 (83.5)	861.8 (122.3)	919.3 (156.1)	885.4 (106.8)	909.6 (111.4)	0 (-42.8 to 42.8)	57.5 (0.6 to 114.3)	24.2 (-16 to 64.4)	-62.9 (-172.6 to 46.7)	9.7 (-108.4 to 127.8)	-53.2 (-115.8 to 9.3)
SDNN (ms)	25.5 (11.4)	23.6 (10.0)	25.5 (14.9)	34.8 (22.7)	24.9 (9.4)	26.8 (11.2)	-1.9 (-7.0 to 3.0)	9.3 (2.3 to 16.3)	1.9 (-1.8 to 5.6)	-11.2 (-25.8 to 3.3)	8.0 (-6.6 to 22.7)	-3.2 (-11.0 to 4.5)
rMSSD (ms)	25.0 (13.3)	23.5 (10.2)	24.3 (14.7)	37.4 (25.1)	25.0 (10.0)	28.4 (13.7)	-1.5 (-6.8 to 3.8)	13.1 (2.9 to 23.3)	3.4 (-1.1 to 7.9)	-13.9 (-30.4 to 2.5)	9.0 (-9.2 to 27.3)	-4.8 (-13.2 to 3.4)
LF (n.u.)	52.3 (21.9)	47.2 (18.5)	53.4 (24.7)	46.0 (18.4)	54.1 (22.1)	47.1 (19.2)	-5.1 (-14.0 to 3.8)	-7.4 (-19.1 to 4.3)	-7 (-17.3 to 3.4)	1.1 (-15.0 to 17.4)	-1.1 (-15.5 to 13.3)	0.1 (-16.3 to 16.4)
HF (n.u.)	47.6 (21.9)	52.6 (18.6)	46.6 (24.5)	53.8 (18.4)	45.8 (22.0)	52.7 (19.2)	5 (-3.9 to 14.0)	7.2 (-4.3 to 18.9)	6.9 (-3.4 to 17.3)	-1.2 (-17.5 to 15.0)	1.1 (-13.2 to 15.6)	-0.1 (-16.4 to 16.2)
SD1 (ms)	17.7 (9.4)	16.6 (7.2)	17.2 (10.4)	26.5 (17.8)	17.8 (7.0)	20.1 (9.7)	-1.1 (-4.8 to 2.6)	9.3 (2.0 to 16.5)	2.3 (-0.9 to 5.5)	-9.8 (-21.5 to 1.8)	6.4 (-6.5 to 19.3)	-3.4 (-9.3 to 2.4)
SD2 (ms)	31.1 (14.0)	28.6 (12.8)	30.8 (18.6)	41.0 (27.4)	30.0 (12.2)	31.6 (13.7)	-2.5 (-8.9 to 3.8)	10.2 (2.2 to 18.2)	1.6 (-3.2 to 6.3)	-12.4 (-29.8 to 4.9)	9.4 (-7.8 to 26.7)	-3.0 (-13.1 to 7.0)

Postural adjustment

R-R interval (ms)	736.9 (109.0)	721.8 (77.2)	754.9 (98.6)	792.9 (110.8)	819.8 (111.7)	805.7 (115.5)	-15.1 (-65.6 to 35.6)	38 (-6.4 to 82.4)	-14.1 (-66.2 to 38.1)	-71(-159.2 to 17.2)	-12.8 (-125.1 to 99.5)	-83.8 (-149.1 to -18.5)
SDNN (ms)	18.7 (7.9)	19.3 (6.0)	22.5 (12.8)	27.6 (12.3)	22.1 (8.4)	25.3 (10.7)	0.6 (-3.2 to 4.4)	5.1 (-0.3 to 10.3)	3.2 (-0.1 to 6.7)	-8.2 (-17.0 to 0.5)	2.2 (-7.2 to 11.6)	-6.0 (-11.8 to -0.2)
rMSSD (ms)	13.3 (8.2)	12.5 (4.4)	17.9 (11.3)	21.6 (12.3)	20.2 (10.0)	20.2 (11.3)	-0.8 (-4.4 to 3.0)	3.7 (-1.4 to 8.7)	0 (-3.5 to 3.5)	-9.0 (-17.2 to -0.7)	1.3 (-8.7 to 11.5)	-7.6 (-13.1 to -2.1)
LF (n.u.)	71.9 (18.9)	75.2 (11.6)	68.5 (18.8)	72.4 (15.1)	61.0 (19.6)	69.5 (20.2)	3.3 (-5.5 to 12.1)	3.9 (-5.3 to 13.1)	8.5 (0.06 to 16.8)	2.7 (-9.0 to 14.6)	2.9 (-9.6 to 15.5)	5.6 (-7.8 to 19.1)
HF (n.u.)	28.0 (18.9)	24.7 (11.5)	31.3 (18.8)	27.5 (15.1)	38.8 (19.6)	30.4 (20.2)	-3.3 (-12.1 to 5.4)	-3.8 (-13.1 to 5.3)	-8.4 (-16.7 to -0.05)	-2.8 (-14.6 to 9.0)	-2.9 (-15.4 to 9.6)	-5.7 (-19.1 to 7.7)
SD1 (ms)	9.4 (5.8)	8.9 (3.1)	12.7 (8.0)	15.3 (8.7)	14.3 (7.0)	14.3 (8.0)	-0.5 (-3.1 to 2.1)	2.6 (-1.0 to 6.1)	0 (-2.5 to 2.5)	-6.4 (-12.2 to -0.5)	0.9 (-6.2 to 8.1)	-5.4 (-9.3 to -1.5)
SD2 (ms)	24.5 (10.4)	25.7 (8.2)	28.8 (17.0)	35.6 (15.9)	27.4 (10.4)	32.4 (13.9)	1.2 (-3.6 to 6.2)	6.8 (-0.05 to 13.6)	5 (0.4 to 9.6)	-9.8 (-21.3 to 1.6)	3.1 (-8.7 to 15.0)	-6.6 (-14.6 to 1.2)

Post-postural adjustment

R-R interval (ms)	888.1 (95.1)	889.2 (108.8)	900.7 (120.6)	943.6 (142.7)	908.9 (96.9)	944.7 (111.7)	1.1 (-43.2 to 45.4)	42.9 (-19.9 to 105.8)	35.8 (-10.0 to 81.6)	-54.4 (-173.3 to 64.4)	-1(-123.4 to 121.2)	-55.4 (-121.5 to 10.5)
SDNN (ms)	28.6 (7.7)	27.3 (11.4)	28.4 (12.1)	38.1 (20.4)	28.8 (11.7)	28.4 (10.7)	-1.3 (-6.6 to 4.1)	9.7 (4.0 to 15.3)	-0.4 (-3.7 to 3.0)	-10.7 (-24.3 to 2.7)	9.6 (-2.8 to 22.1)	-1.1 (-9.7 to 7.5)
rMSSD (ms)	26.0 (10.6)	25.9 (14.3)	29.1 (14.5)	39.8 (23.5)	27.8 (11.7)	30.1 (15.6)	-0.1 (-5.4 to 5.3)	10.7 (3.2 to 18.0)	2.3 (-1.9 to 6.4)	-13.8 (-31.0 to 3.3)	9.6 (-8.1 to 27.4)	-4.2 (-15.0 to 6.5)
LF (n.u.)	56.9 (18.2)	55.8 (17.5)	54.9 (17.6)	49.6 (20.2)	56.3 (16.2)	54.0 (16.4)	-1.1 (-10.6 to 8.4)	-5.3 (-17.0 to 6.4)	-2.3 (-10.7 to 6.0)	6.1 (-9.8 to 22.1)	-4.3 (-21.9 to 13.1)	1.7 (-12.2 to 15.8)
HF (n.u.)	41.6 (18.7)	44.1 (17.5)	44.9 (17.6)	50.0 (20.4)	43.5 (16.2)	45.8 (16.3)	2.5 (-7.4 to 12.4)	5.1 (-6.6 to 16.9)	2.3 (-6.0 to 10.7)	-5.9 (-22.0 to 10.1)	4.1 (-13.4 to 21.8)	-1.7 (-15.7 to 12.2)

SD1 (ms)	19.0 (6.9)	19.0 (9.8)	20.2 (9.5)	28.5 (17.2)	19.7 (8.3)	21.4 (11.0)	0 (-3.7 to 3.8)	8.3 (2.2 to 14.3)	1.7 (-1.3 to 4.6)	-9.5 (-21.2 to 2.2)	7.1 (-5.6 to 19.9)	-2.3 (-10.0 to 5.3)
SD2 (ms)	35.7 (9.3)	33.6 (13.8)	37.1 (20.7)	44.9 (24.7)	35.3 (15.3)	33.6 (11.6)	-2.1 (-9.1 to 4.8)	7.8 (0.5 to 15.1)	-1.7 (-6.0 to 2.7)	-11.3 (-27.2 to 4.5)	11.2 (-2.6 to 25.1)	0 (-10.0 to 9.9)

Data of quality of life scores

Physical	12.2 (2.9)	12.3 (2.2)	12.8 (1.9)	14 (2.7)	12.3 (1.5)	14.2 (2.4)	0.1 (-0.9 to 1.1)	1.2 (-0.0 to 2.4)	1.9 (0.7 to 3.0)	-1.6 (-3.7 to 0.4)	-0.2 (-2.4 to 1.9)	-1.8 (-3.7 to 0.0)
Psychological	13.4 (2.7)	13.6 (2.0)	13.3 (2.6)	14.6 (2.2)	12.3 (1.7)	14.2 (1.9)	0.2 (-0.5 to 0.9)	1.3 (0.4 to 2.2)	1.9 (1.2 to 2.5)	-1 (-2.6 to 0.5)	0.3 (-1.4 to 2.1)	-0.6 (-2.1 to 0.8)
Social relationships	13.2 (3.2)	13.1 (2.7)	13.5 (2.8)	14.7 (2.0)	13.4 (2.2)	14.3 (1.7)	-0.1 (-1.1 to 1.0)	1.2 (-0.1 to 2.5)	0.9 (0.1 to 1.7)	-1.6 (-3.6 to 0.4)	0.4 (-1.3 to 2.1)	-1.2 (-2.9 to 0.5)
Environment	12.4 (2.1)	12.3 (2.0)	11.6 (2.4)	12.4 (2.3)	11.1 (2.2)	12.3 (2.1)	-0.1 (-0.7 to 0.6)	0.8 (-0.0 to 1.7)	1.2 (0.7 to 1.7)	-0.1 (-1.3 to 1.1)	0.1 (-1.7 to 2.0)	0 (-1.9 to 2.0)
Overall QOL	12.5 (3.4)	12.4 (2.3)	12 (2.1)	13.1 (2.5)	12.1 (2.3)	14.2 (2.5)	-0.1 (-1.6 to 1.4)	1.1 (-0.0 to 2.2)	2.1 (1.0 to 3.1)	-0.7 (-2.9 to 1.5)	-1.1 (-3.2 to 1.0)	-1.8 (-3.9 to 0.3)

Strength, flexibility, and functional tasks

Flexibility (cm)	226.8 (82.3)	219.8 (82.8)	229.9 (75.5)	263.9 (66.1)	227.4 (103.4)	293.7 (51.3)	-7 (-20.4 to 6.2)	34 (11.2 to 56.8)	66.3 (22.2 to 110.4)	-44.1 (-99.1 to 10.8)	-29.8 (-73.7 to 14.1)	-73.9 (-135.3 to -12.5)
Righthandstrength (kgf)	28.6 (8.7)	27.7 (7.9)	29.1 (6.1)	29.7 (4.7)	27.5 (9.1)	27.7 (7.3)	-0.9 (-2.5 to 0.9)	0.6 (-1.6 to 2.8)	0.2 (-1.5 to 2)	-1.9 (-8 to 4.2)	1.9 (-3.6 to 7.5)	0 (-6.7 to 6.8)
Lefthandstrength (kgf)	27 (7.5)	26.7 (6.7)	26.5 (5.2)	28.6 (5.1)	26.7 (9.3)	28.5 (7.3)	-0.3 (-1.7, 1.3)	2.1 (0 to 4)	1.8 (-0.2 to 3.7)	-1.8 (-7.3 to 3.7)	0.1 (-5 to 5.1)	-1.7 (-8.3 to 4.8)
VST (ss)	3.9 (1.2)	4.1 (1.9)	3.6 (1.0)	3.4 (1.0)	4.2 (1.3)	4.0 (2.6)	0.2 (-0.4 to 0.7)	-0.2 (-0.5 to 0.2)	-0.2 (-1 to 0.5)	0.6 (-0.7 to 2)	-0.6 (-2 to 0.9)	0.1 (-2 to 2.2)
VSP (ss)	4.8 (1.3)	5.3 (1.8)	4.3 (1.2)	4.3 (1.2)	5.5 (2.9)	5.5 (3.7)	0.5 (-0.2 to 1.3)	0 (-0.3 to 0.3)	0 (-1 to 0.9)	1 (-0.4 to 2.4)	-1.2 (-3.2 to 0.9)	-0.2 (-2.8 to 2.5)

VPS (ss)	29.1 (5.2)	30.9 (8.1)	28.2 (6.6)	28.8 (5.6)	31.2 (7.1)	29.3 (7.2)	1.8 (-2.1 to 5.9)	0.6 (-2.6 to 3.9)	-1.9 (-5 to 1.1)	2.1 (-3.9 to 8.2)	-0.4 (-4.4 to 3.5)	1.6 (-5.1 to 8.4)
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Data of cardiorespiratory fitness parameters

Test time at VT1 (ss)	296.3 (109.1)	301.4 (95.9)	254.3 (81.9)	332.5 (110.3)	302.5 (139.7)	418.9 (135.4)	5.1 (-44.8 to 55.1)	78.2 (10.8 to 145.6)	116.3 (59.8 to 172.9)	-31.1 (-106.7 to 44.5)	-86.3 (-190.3 to 17.6)	-117.4 (-230 to -4.9)
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Test stage at VT1 (km/h)	4.4 (0.4)	4.4 (0.4)	4.2 (0.4)	4.5 (0.5)	4.4 (0.6)	4.9 (0.5)	-0.02 (-0.2 to 0.2)	0.3 (0.02 to 0.7)	0.5 (0.2 to 0.8)	-0.1 (-0.5 to 0.2)	-0.3 (-0.8 to 0.08)	-0.5 (-1.0 to -0.03)
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HR at VT1 (bpm)	131.1 (13.9)	121.2 (12.0)	128.1 (21.2)	128.5 (17.1)	128.6 (16.2)	126 (13.9)	-9.9 (-17.6 to -2.0)	0.4 (-9.1 to 10.0)	-2.6 (-8.3 to 3.2)	-7.2 (-20.8 to 6.2)	2.4 (-11.4 to 16.4)	-4.8 (-12.9 to 3.3)
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Absolute power at VT1 (W)	144.9 (39.1)	143.1 (34.7)	124.2 (35.9)	154.6 (57.4)	133.7 (48.0)	164.9 (35.9)	-1.8 (-18.8 to 15.2)	30.3 (4.4 to 56.2)	31.3 (11.9 to 50.4)	-11.4 (-46.8 to 23.8)	-10.2 (-43.9 to 23.4)	-21.7 (-51 to 7.4)
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Relative power at VT1 (W/kg)	1.8 (0.5)	1.8 (0.4)	1.6 (0.3)	2.0 (0.6)	1.9 (0.7)	2.4 (0.6)	0.001 (-0.2 to 0.2)	0.3 (0.01 to 0.7)	0.5 (0.2 to 0.8)	-0.1 (-0.5 to 0.2)	-0.4 (-0.9 to 0.1)	-0.5 (-1.1 to -0.03)
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Absolute VO ₂ at VT1 (l/min)	1.3 (0.2)	1.1 (0.2)	1.1 (0.2)	1.1 (0.2)	1.2 (0.2)	1.1 (0.2)	-0.1 (-0.2 to -0.07)	0.03 (-0.08 to 0.1)	-0.07 (-0.1 to -0.03)	-0.01 (-0.2 to 0.1)	0.01(-0.1 to 0.1)	-0.003 (-0.1 to 0.1)
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Relative VO ₂ at VT1 (ml/kg.min)	16.6 (2.3)	14.4 (2.3)	14.8 (2.9)	15.0 (2.9)	17.1 (3.8)	16.4 (3.1)	-2.1 (-3.3 to -1.0)	0.2 (-1.5 to 2.0)	-0.6 (-2.2 to 1.0)	-0.6 (-2.8 to 1.6)	-1.3 (-3.7 to 0.9)	-2.0 (-4.3 to 0.3)
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Test time at VT2 (ss)	431.4 (116.1)	431.6 (115.9)	406.7 (100.2)	449.8 (118.7)	429.8 (130.3)	529.4 (154.9)	0.2 (-46.7 to 47.2)	43.0 (-0.6 to 86.7)	99.6 (50.2 to 148.9)	-18.1 (-124.3 to 88)	-79.5 (-212.5 to 53.3)	-97.7 (-226.5 to 31)
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Test stage at VT2 (km/h)	5.1 (0.5)	5.0 (0.5)	5.0 (0.4)	5.1 (0.6)	5.1 (0.6)	5.5 (0.6)	-0.04 (-0.2 to 0.1)	0.1 (-0.05 to 0.3)	0.3 (0.1 to 0.6)	-0.07 (-0.6 to 0.4)	-0.3 (-0.9 to 0.2)	-0.4 (-1.0 to 0.1)
HR at VT2 (bpm)	147.3 (14.8)	137.3 (14.2)	137.3 (23.0)	139.1 (17.2)	138 (16.7)	139.2 (12.5)	-10 (-17.5 to -2.4)	1.8 (-5.9 to 9.6)	1.2 (-5.1 to 7.5)	-1.7 (-11.8 to 8.2)	-0.1 (-13.3 to 13.2)	-1.8 (-12.6 to 8.9)
Absolute power at VT2 (W)	199.1 (32.9)	197.5 (38.6)	185.7 (57.9)	203.3 (68.6)	180.8 (46.9)	210.1 (45.7)	-1.5 (-19.4 to 16.3)	17.5 (-4 to 39.2)	29.2 (13.1 to 45.4)	-5.7 (-49.8 to 38.2)	-6.7 (-51.4 to 37.9)	-12.5 (-47 to 21.9)
Relative power at VT2 (W/kg)	2.5 (0.5)	2.5 (0.6)	2.4 (0.5)	2.6 (0.7)	2.5 (0.7)	3.0 (0.8)	-0.03 (-0.3 to 0.2)	0.2 (-0.05 to 0.4)	0.4 (0.2 to 0.7)	-0.09 (-0.7 to 0.5)	-0.4 (-1.2 to 0.3)	-0.5 (-1.2 to 0.1)
Absolute VO ₂ at VT2 (l/min)	1.5 (0.2)	1.3 (0.2)	1.3 (0.3)	1.3 (0.2)	1.3 (0.2)	1.3 (0.2)	-0.1 (-0.2 to -0.05)	-0.03 (-0.1 to 0.07)	-0.03 (-0.1 to 0.04)	0.001 (-0.2 to 0.2)	0.04 (-0.1 to 0.2)	0.04 (-0.1 to 0.1)
Relative VO ₂ at VT2 (ml/kg.min)	19.5 (3.7)	17.2 (3.1)	18.3 (3.2)	17.7 (3.0)	19.2 (3.5)	19.0 (3.8)	-2.3 (-3.8 to -0.7)	-0.5 (-2.3 to 1.1)	-0.2 (-1.3 to 0.9)	-0.5 (-3.3 to 2.2)	-1.2 (-4.1 to 1.6)	-1.7 (-4.8 to 1.2)

Footnote: SD: standard deviation; CI: Confidence Interval; CG: Control Group; MP: Mat Pilates Group; MP+AE: Mat Pilates Supplemented with Aerobic Exercise Group; BMI: body mass index; WC: Waist circumference; HC: Hip circumference; SBP: systolic blood pressure; DBP: diastolic blood pressure; MBP: mean blood pressure; HR: heart rate; DP: double product; R-R interval: the average of all normal R-R intervals; SDNN: standard deviation of R-R intervals; rMSSD: the squared root of the mean squared differences of successive R-R intervals; LF: low-frequency band; HF: high-frequency band; SD1: variance of R-R intervals in a short time scale; SD2: variance of R-R intervals in a long time scale; Overall QOL: Overall quality of life; VST: velocity of moving from sitting to standing position test; VSP: velocity of moving from supine to standing position; VPS: velocity to put on sneakers and tie the laces; SS: seconds; VT1: first ventilatory threshold; VT2: second ventilatory threshold.

Mean (standard deviation).

Mean difference (Confidence Interval).

References

1. Niskanen JP, Tarvainen MP, Ranta-Aho PO, Karjalainen PA. Software for advanced HRV analysis. *Comput Methods Programs Biomed.* 2004;76(1):73–81.
2. Fleck MP, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Application of the Portuguese version of the abbreviated instrument of quality life WHOQOL-bref. *Rev Saude Publica.* 2000;34(2):178–83.
3. Wells KF, Dillon EK. The sit and reach—A test of back and leg flexibility. *Res Q.* 1952;23(1):115–8.
4. Raso V. A adiposidade corporal e a idade prejudicam a capacidade funcional para realizar as atividades da vida diária de mulheres acima de 47 anos. *Rev Bras Med do Esporte.* 2002;8(6):225–34.
5. Barbosa e Silva O, Sobral Filho DC. Uma nova Proposta para Orientar a Velocidade e Inclinação no Protocolo em Rampa na Esteira Ergométrica. *Arq Bras Cardiol.* 2003;81(no 1):42–7.
6. Balady GJ, Arena R, Sietsema K, Myers J, Coke L, Fletcher GF, et al. Clinician's guide to cardiopulmonary exercise testing in adults: A scientific statement from the American heart association. *Circulation.* 2010;122(