

Supplemental Digital Content 4- Improvements in Physiological and Psychological Variables at Each Phase Transition

Phase Transition	Phase 1 to 2			Phase 2 to 3			Phase 3 to 4		
	N	48		142		81			
		Pre	Post	Percent Change	Pre	Post	Percent Change	Pre	Post
HR (bpm)	83.9 ± 15.1	79.4 ± 11.9*	-5	76.9 ± 11.6	75.9 ± 12.3	-1	76.1 ± 10.2	77.1 ± 9.3	1
Systolic BP (mmHg)	128.6 ± 12.7	124.7 ± 13.4*	-3	125.4 ± 14.6	120.8 ± 13.3 †	-4	121.4 ± 13.2	122.4 ± 13.6	1
Diastolic BP (mmHg)	76.2 ± 10.2	75.0 ± 8.4*	-2	76.9 ± 9.5	73.2 ± 9.3†	-5	74.3 ± 9.4	75.1 ± 8.4	1
Body Fat (%)	33.6 ± 8.6	35.1 ± 9.8	5	32.7 ± 9.7	34.0 ± 9.6*	4	33.9 ± 9.4	34.7 ± 9.7	2
FVC (% of predicted)	104 ± 19.8	106.3 ± 22.7	2	102.9 ± 22.7	104.0 ± 27.5†	1	105.4 ± 25.6	102.9 ± 28.7	-2
FEV1 (% of predicted)	101 ± 18.1	102.2 ± 21.5	1	98.5 ± 21.1	101.0 ± 28.2	3	100.4 ± 28.1	97.9 ± 26.2	-3
Chair Squat Test (reps)	15.4 ± 12.8	24.6 ± 13.7*	60	19.3 ± 12.7	25.9 ± 13.5†	34	25.3 ± 14.5	27.5 ± 13.9	9
Plank Test (seconds)	38.4 ± 20.7	54.2 ± 19.2†	41	42.8 ± 19.9	49.1 ± 19.2†	15	49.4 ± 20.3	51.5 ± 16.9	4
Handgrip (kg)	25.7 ± 9.1	26.5 ± 9.5*	3	26.0 ± 8.5	27.2 ± 9.0†	5	27.4 ± 10.0	27.9 ± 9.7*	2
Sit and Reach Flexibility (in)	10.7 ± 6.6	12.5 ± 6.0	16	10.2 ± 6.9	11.8 ± 5.2*	16	12.0 ± 5.0	12.3 ± 4.0	3
Back Scratch Test (in)	-3.2 ± 5.2	-3.3 ± 5.4	2	-3.4 ± 5.5	-3.7 ± 5.4	11	-3.5 ± 5.6	-3.1 ± 5.7	-12
QOL (score)	20.6 ± 4.4	21.6 ± 5.0	5	21.0 ± 4.7	22.3 ± 4.8†	6	22.5 ± 4.8	22.5 ± 4.6	0
Depression (score)	10.4 ± 5.9	8.5 ± 5.9*	-18	9.2 ± 6.2	6.7 ± 5.8 †	-27	6.6 ± 5.4	6.5 ± 5.8	-1

Values represent mean ± standard deviation

\* denotes p value < 0.05 between pre and post values.

† denotes p value < 0.001 between pre and post values.

HR= heart rate; BP=blood pressure; FVC = forced vital capacity; FEV1 = forced expiratory volume in one second

QOL= quality of life (Ferrans and Powers QOL Index Version III); depression (Beck Depression Inventory)