

Supplementary Material

Influence of a 12-Month Structured Exercise Program on the Micronutrient-Cognitive Fitness-Physical Association Profiles in Mild Cognitive Impairment

Supplementary Table 1. Means and standard deviation of the data obtained at T0 and T2

	S&T (N=14)						AE (N=12)						CG (N=14)					Time*	
	T0			T2			T0			T2			T0		T2			Group	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	p
MoCA (score 0/30)	14	23.43	1.28	14	25.64	2.17	12	23.08	2.64	11	24.00	4.38	14	22.43	2.17	14	24.00	1.80	0.486
TMT_A (s)	14	43.97	12.56	14	43.47	19.29	12	50.59	21.16	12	48.53	18.82	14	51.02	25.70	14	49.52	23.56	0.971
TMT_B (s)	14	106.18	28.36	14	116.82	55.11	12	166.17	86.61	12	138.54	82.98	14	159.44	73.17	14	137.73	69.79	0.190
Delis1 (number of words/min)	14	11.79	3.38	14	12.31	3.49	12	13.20	4.57	12	13.34	4.92	14	11.29	3.44	14	11.29	3.44	0.795
Delis2 (number of words/min)	14	18.57	3.92	14	19.93	5.43	12	18.75	5.53	12	18.00	7.34	13	16.23	3.37	14	16.64	5.12	0.484
VO2peak (mL/kg/min)	14	22.53	4.25	14	23.37	3.07	12	24.48	6.54	11	25.91	7.82	14	23.74	4.60	14	21.05	3.74	0.002
DEMQL (total score)	14	91.36	8.62	14	90.86	10.60	12	83.67	16.00	11	97.64	11.16	14	88.79	11.26	14	87.07	15.52	0.004
LAPAQ (min)	14	251.07	149.42	14	310.71	187.77	12	263.75	177.20	9	296.67	96.86	14	176.79	120.59	14	211.21	139.16	0.915
Steps/day	13	10880.13	4490.79	13	9961.02	2577.88	10	11639.54	4090.32	10	9959.71	4255.41	13	8616.99	2614.87	9	9381.88	4181.04	0.356
TUG (s)	14	8.64	1.04	14	8.57	1.12	11	9.06	2.04	10	8.73	1.17	14	9.09	1.56	14	9.06	1.56	0.992
CST (total number of stands within 30 s)	14	13.86	2.32	14	14.36	3.37	11	12.82	3.60	9	16.33	5.32	14	12.57	3.48	14	12.79	3.21	0.285
GripStrength_R (kg)	14	28.40	8.16	14	26.52	8.06	11	35.19	10.42	10	30.53	8.84	14	33.57	11.04	13	34.54	9.87	0.480
GripStrenght_L (kg)	14	25.96	6.69	14	25.26	8.19	11	33.45	10.14	10	28.55	10.20	14	30.97	9.41	13	32.70	9.89	0.301
CogState_DET (ms log10)	14	2.62	0.08	14	2.65	0.08	12	2.64	0.10	12	2.64	0.10	14	2.64	0.10	14	2.64	0.08	0.443

CogState_IDN (ms log10)	14	2.80	0.06	14	2.81	0.07	12	2.81	0.08	12	2.79	0.052	14	2.78	0.12	14	2.80	0.06	0.216
CogState_OCL (number of correct inputs)	14	0.99	0.06	14	0.99	0.10	12	0.93	0.11	12	0.94	0.10	14	0.91	0.09	14	0.94	0.09	0.713
CogState_ONB (number of correct inputs)	14	1.28	0.14	14	1.37	0.13	12	1.22	0.19	12	1.19	0.19	14	1.30	0.16	14	1.29	0.15	0.254
CogState_ISLT (number of recalled items)	14	21.71	4.83	14	20.71	4.83	12	19.25	3.72	12	21.58	7.45	14	19.22	3.38	13	20.46	3.57	0.254
CogState_ISLT_RE (number of recalled items)	14	6.00	2.63	14	6.21	2.26	12	4.92	2.88	12	6.17	3.83	14	5.00	2.25	13	5.54	2.11	0.584
Lutein (µM)	14	0.59	0.40	14	0.42	0.20	12	0.42	0.18	12	0.32	0.11	14	0.40	0.16	14	0.30	0.14	0.462
Zeaxanthin (µM)	14	0.15	0.19	14	0.07	0.05	12	0.08	0.04	12	0.05	0.01	14	0.08	0.03	14	0.05	0.02	0.335
Cryptoxanthin (µM)	14	0.54	0.33	14	0.34	0.25	12	0.41	0.34	12	0.25	0.17	14	0.45	0.57	14	0.28	0.30	0.906
Lycopene (µM)	14	0.50	0.18	14	0.39	0.15	12	0.61	0.35	12	0.38	0.13	14	0.57	0.26	14	0.41	0.18	0.282
Alpha_Carotene (µM)	14	0.16	0.10	14	0.10	0.08	12	0.10	0.04	12	0.08	0.04	14	0.13	0.08	14	0.10	0.05	0.108
Beta_Carotene (µM)	14	1.03	0.90	14	0.67	0.51	12	0.57	0.31	12	0.40	0.23	14	0.69	0.38	14	0.49	0.23	0.278
Alpha_Tocopherol (µM)	14	29.95	9.51	14	28.82	3.82	12	27.31	5.29	12	27.30	7.40	14	26.90	5.53	14	26.92	6.59	0.865
Gamma_Tocopherol (µM)	0						12	2.17	1.02	0			14	2.14	0.53	0			
Retinol (µM)	14	1.62	0.44	2	1.69	0.80	12	1.39	0.33	1	1.23		14	1.43	0.27	1	0.72		0.867

S&T, stretching and toning group; AE, aerobic exercise group; CG, control group; BMI, body mass index; RBANS, Repeatable Battery for the Assessment of Neuropsychological Status; MoCA, Montreal Cognitive Assessment; TMT A, Trail Making Test A; TMT B, Trail Making Test B; Delis 1, Letter Fluency; Delis 2= Category Fluency; VO2PEAK, VO2PEAK; DemQOL, health-related quality of life for people with Dementia; LAPAQ, Longitudinal Ageing Study Amsterdam Physical Activity Questionnaire; Steps, steps per day; TUG, Timed Up and Go; CST, 30 Seconds Chair Stand; HGR, Hand Grip Strength Right; HGL, Hand Grip Strength Left; OCL, One Card Learning Task; OBT, One Back Task; ISLT, International Shopping List Task; ISLT Recall, International Shopping List Recall Task