

S1 Table: Distribution of performance of participants in various cognitive tests by micronutrient levels						
	Classification of cognitive performance					p-value
	Borderline	Dull normal	Average	Above-average	Superior	
Levels of micronutrients [n, median (IQR)]						
<i>Calcium (mg/dl)</i>						
CPM/SPM	142, 10.0 (8.7-11.4)	560, 9.7 (8.6-10.8)	1114, 9.6 (8.7-10.6)	318, 9.8 (9.0-10.6)	128, 9.8 (8.9-10.3)	0.12
Coding Test	237, 9.4 (8.0-10.4)	263, 9.7 (8.6-10.8)	984, 9.6 (8.7-10.7)	372, 9.7 (8.9-10.7)	406, 9.7 (8.9-10.7)	0.02
Digit Span	524, 9.5 (8.1-10.5)	703, 9.6 (8.6-10.5)	828, 9.7 (8.9-10.9)	141, 10.0 (9.3-11.0)	66, 9.8 (8.8-11.8)	<0.001
Arithmetic	278, 9.8 (8.8-10.7)	671, 9.6 (8.6-10.8)	1016, 9.6 (8.7-10.6)	191, 9.8 (8.9-11.2)	106, 9.7 (8.7-10.7)	0.20
<i>Iron (µg/dl)</i>						
CPM/SPM	143, 65.3 (44.8-85.4)	558, 69.2 (47.9-92.1)	1117, 70.3 (51.0-92.0)	318, 72.4 (51.6-93.9)	127, 79.8 (57.4-99.3)	0.02
Coding Test	237, 69.4 (48.8-92.0)	262, 69.3 (47.2-87.2)	986, 70.3 (51.1-94.6)	372, 69.2 (48.4-90.8)	406, 73.2 (53.3-93.8)	0.28
Digit Span	523, 68.6 (45.0-88.0)	705, 69.5 (51.1-92.1)	826, 71.6 (50.8-95.0)	142, 74.6 (55.9-98.7)	67, 77.9 (53.8-95.0)	0.04
Arithmetic	277, 67.1 (45.4-87.5)	671, 69.1 (50.0-90.6)	1017, 71.5 (51.1-94.0)	193, 75.5 (53.8-96.0)	105, 74.4 (49.0-95.8)	0.04
<i>Zinc (µg/dl)</i>						
CPM/SPM	114, 124.9 (97.7-158.0)	499, 119.7 (94.2-157.8)	1008, 116.7 (90.2-153.2)	286, 118.9 (93.5-179.8)	113, 127.5 (98.8-178.8)	0.05
Coding Test	206, 117.3 (96.9-160.5)	245, 119.5 (90.5-150.1)	881, 118.4 (90.9-159.1)	320, 120.3 (93.8-173.5)	368, 118.3 (94.8-160.0)	0.70
Digit Span	465, 125.5 (96.9-164.3)	629, 117.9 (93.4-161.2)	750, 116.1 (87.8-155.9)	118, 111.9 (87.8-154.9)	58, 116.1 (94.6-160.9)	0.03
Arithmetic	242, 123.9 (95.7-159.7)	605, 117.0 (91.1-159.1)	902, 118.7 (93.6-159.0)	172, 118.2 (90.2-160.2)	99, 115.4 (91.0-174.1)	0.84
<i>Selenium (µg/dl)</i>						
CPM/SPM	113, 10.4 (7.9-14.5)	495, 11.6 (8.8-15.7)	997, 10.8 (7.6-14.9)	285, 11.1 (8.6-15.2)	113, 11.4 (8.4-17.5)	<0.001
Coding Test	205, 10.8 (8.5-15.7)	242, 11.1 (7.9-15.7)	870, 11.2 (8.1-15.5)	316, 10.9 (7.9-14.2)	370, 11.2 (8.4-14.8)	0.56
Digit Span	463, 11.9 (8.9-16.3)	624, 11.3 (8.4-15.4)	741, 10.5 (7.6-14.5)	117, 9.9 (6.9-13.4)	58, 11.2 (8.8-15.5)	<0.001
Arithmetic	240, 11.2 (8.5-16.0)	597, 11.0 (8.3-14.8)	897, 11.1 (8.1-15.5)	170, 11.0 (7.8-15.2)	99, 10.4 (7.7-15.1)	0.56
<i>Vitamin A (µg/dl)</i>						
CPM/SPM	140, 48.8 (37.2-62.9)	549, 53.6 (36.7-76.5)	1116, 60.4 (42.2-89.6)	319, 67.5 (48.0-106.6)	126, 74.5 (56.6-123.8)	<0.001
Coding Test	235, 51.7 (36.7-82.3)	258, 57.0 (41.5-88.8)	984, 60.6 (41.6-88.6)	365, 62.1 (45.1-94.7)	408, 58.2 (42.7-88.8)	<0.001
Digit Span	510, 53.3 (35.8-80.5)	702, 59.1 (40.7-89.9)	829, 61.5 (45.3-91.3)	140, 63.4 (46.2-92.2)	69, 67.4 (47.7-94.8)	<0.001
Arithmetic	271, 58.7 (41.6-94.1)	662, 58.3 (39.9-89.0)	1016, 59.5 (41.3-86.1)	196, 61.0 (43.4-90.3)	105, 65.1 (47.6-101.1)	0.23
<i>Vitamin D (ng/ml)</i>						
CPM/SPM	143, 12.0 (8.4-17.6)	558, 13.9 (10.1-19.4)	1119, 13.6 (9.2-19.5)	319, 13.9 (9.8-18.8)	127, 15.7 (10.8-19.8)	0.02

Coding Test	238, 14.5 (9.8-20.6)	264, 13.8 (9.5-19.5)	987, 13.6 (9.6-19.3)	369, 13.5 (9.6-18.0)	408, 14.1 (10.0-18.7)	0.47
Digit Span	523, 14.1 (10.0-19.6)	708, 14.1 (9.9-20.1)	825, 13.2 (9.2-18.2)	142, 14.4 (9.7-19.1)	68, 14.4 (10.4-18.1)	0.03
Arithmetic	280, 13.0 (8.5-17.9)	668, 13.6 (10.0-18.7)	1019, 14.1 (9.6-19.5)	192, 14.3 (10.4-19.2)	107, 14.7 (9.8-20.1)	0.09
<i>Folate (ng/ml)</i>						
CPM/SPM	143, 3.8 (2.7-5.5)	560, 4.2 (3.1-6.1)	1124, 4.4 (3.2-6.2)	322, 4.1 (2.9-6.0)	127, 4.4 (3.3-5.9)	0.01
Coding Test	240, 3.8 (2.8-5.5)	264, 4.1 (2.8-5.7)	992, 4.3 (3.2-6.1)	370, 4.4 (3.2-6.4)	410, 4.5 (3.2-6.5)	<0.001
Digit Span	525, 4.2 (2.9-6.1)	710, 4.2 (3.1-6.0)	831, 4.3 (3.2-6.1)	141, 5.0 (3.5-6.6)	69, 4.6 (3.1-5.7)	0.03
Arithmetic	279, 3.9 (2.7-5.6)	674, 4.2 (3.0-5.6)	1020, 4.4 (3.2-6.4)	196, 4.7 (3.1-7.1)	107, 4.3 (3.3-6.5)	<0.001
<i>Vitamin B12 (pg/ml)</i>						
CPM/SPM	142, 236 (174-341)	558, 215 (153-315)	1121, 257 (178-365)	321, 303 (220-445)	127, 392 (231-605)	<0.001
Coding Test	240, 233 (160-345)	263, 242 (164-354)	986, 249 (176-360)	370, 285 (186-413)	410, 272 (189-390)	<0.001
Digit Span	524, 221 (157.5-323)	709, 257 (176-379)	826, 275 (195-389)	141, 274 (200-407)	69, 242 (177-358)	<0.001
Arithmetic	278, 250 (177-350)	673, 246 (162-354)	1017, 252 (178-367)	194, 282.5 (204-409)	107, 326 (243-479)	<0.001