

Supplementary Table 1. Constructed database for the flavonoids content in each food item.

Food items	Anthocyanidins (mg/100g)	Flavan-3-ols (mg/100g)	Flavanones (mg/100g)	Flavones (mg/100g)	Flavonols (mg/100g)	Procyanidins (mg/100g)	Isoflavones (mg/100g)
Staple Food							
Coarse cereals	23.65	0.00	0.00	2.68	5.30	0.00	0.00
Sweet potato	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Legume							
Soybeans	29.40	0.00	0.00	13.61	9.68	0.00	20.34
Mixed beans	16.47	0.00	0.00	8.07	12.80	0.00	0.07
Other soy products	0.00	0.00	0.00	0.95	0.56	0.00	4.34
Vegetables							
Legume vegetables	5.00	0.00	0.00	3.18	5.45	0.00	0.12
Leaf vegetables	0.00	0.00	0.00	0.64	12.25	0.00	0.01
Root and stem vegetables	0.00	0.00	0.00	0.05	1.71	0.00	0.01
Solanaceous vegetables	4.87	0.00	0.00	1.60	11.47	0.00	0.05
Melon vegetables	0.00	0.00	0.00	0.53	6.31	0.00	0.00
Stem vegetables	0.00	0.00	0.00	19.63	0.92	0.00	0.00
Cabbages	26.86	0.00	0.66	0.68	5.71	0.00	0.01
Allium	0.00	0.00	0.00	0.01	5.20	0.00	0.01
Mushrooms	0.00	0.00	0.00	0.24	2.34	0.00	0.11
Edible fungi	0.00	0.00	0.00	1.89	3.01	0.00	0.04
Fruits							
Citrus	0.00	0.00	25.66	7.00	17.86	0.00	0.00
Pome fruits	1.44	7.09	0.00	0.64	26.07	43.24	0.07
Stone fruits	5.92	1.55	0.00	1.52	24.34	42.62	0.00
Berries	80.79	4.44	0.09	0.43	9.41	72.60	0.00
Tropical fruit	18.45	0.24	0.00	3.52	20.24	1.38	0.15

Melons	4.91	0.00	0.00	1.13	11.35	0.00	0.00
Nuts							
Melon seeds	0.00	0.00	0.00	0.00	0.00	0.00	0.32
Peanut	1.00	0.00	0.00	0.00	0.00	0.00	0.61
Other nuts	1.22	1.14	0.00	1.13	10.78	0.00	0.01

Supplementary table 2. The information on neuropsychological tests in this study

Cognitive domains	Tests	Details
Memory	AVLT-H	The word list is composed of 12 words, the participants were asked to immediately recall 12 words three times in learning trials, and then performed a short-term delayed recall (5-minute delay time) and a long-term delayed recall (20-minute delay time).
Language	AFT	The participants were required to name as many animals as possible within one minute.
Attention	DSST	There were 9 numbers paired with symbols. The participants were asked to transform the number into the corresponding symbol in the boxes within 90 seconds. The score is the total number of correct matches.
Execution	TMT-B	The Trail Making Test-B was amended, the sequential letters were replaced by white Arabic numerals which match the black Arabic numerals. The participants were asked to connect the number from small to large, with black and white alternation. The shorter time of completion indicated the better performance on TMT-B.

AVLT-H, Auditory Verbal Learning Test-Huashan Version; AFT, Animal Verbal Fluency Test; DSST, Digital Symbol Substitution Test; TMT-B, Trail Making Test-B.