

Supplementary Table 1 Baseline characteristics of the Community Cohort Study of Nervous System Diseases (CCSNSD) project population across quartiles of the DII score

Characteristic	Frequency (%) or Mean(SD)				P-value
	Quartile 1 (n=504)	Quartile 2 (n=506)	Quartile 3 (n=504)	Quartile 4 (n=508)	
Age (years)					<0.001
	68.36±0.33	66.10±0.34	63.85±0.31	64.67±0.32	
Sex					0.394
Male	201(39.9%)	191(37.7%)	190(37.7%)	193(38.0%)	
Female	303(60.1%)	315(62.3%)	314(62.3%)	315(62.0%)	
BMI (kg/m2)					0.006
BMI<24.00 (normal)	180(35.7%)	232(45.8%)	221(43.9%)	189(17.2%)	
24.00≤BMI<28.00 (overweight)	215(42.7%)	194(38.3%)	184(36.5%)	187(36.8%)	
BMI≥28.00 (obese)	109(21.6%)	80(15.8%)	99(19.6%)	132(26.0%)	
Employment					0.120
No	444(88.1%)	430(85.0%)	417(82.7%)	464(85.4%)	
Yes	60(11.9%)	76(15.0%)	87(17.3%)	74(14.6%)	
Education					0.034
Illiteracy	129(25.6%)	137(27.1%)	111(22.0%)	120(23.6%)	
Primary school	181(35.9%)	163(32.2%)	150(29.8%)	155(30.5%)	
Junior high school/above	194(38.5%)	206(40.7%)	243(48.2%)	233(45.9%)	
Tobacco Smoking					0.213
No	409(81.2%)	430(85.0%)	432(85.7%)	426(83.9%)	
Yes	95(18.8%)	76(15.0%)	72(14.3)	82(16.1%)	
Alcohol Drinking					0.344
No	460(91.3%)	448(88.5%)	459(91.1%)	452(89.0%)	
Yes	44(8.7%)	58(11.5%)	45(8.9%)	56(11.0%)	
Physical activities					0.894
Moderate	309(61.3%)	309(61.1%)	305(60.5%)	319(62.8%)	
Vigorous	195(38.7%)	197(38.9%)	199(39.5)	189(37.2%)	
Diabetes					0.444
No	418(82.9%)	436(86.2%)	430(85.3%)	424(83.5%)	
Yes	86(17.1%)	70(13.8%)	74(14.7%)	84(16.5%)	
Depression					<0.001
No	394(78.2%)	390(77.1%)	387(76.8%)	378(74.4%)	
Yes	110(21.8%)	116(22.9%)	117(23.2%)	130(25.6%)	
Hypertension					<0.001
No	205(40.7%)	222(43.9%)	231(45.8%)	195(38.4%)	
Yes	299(59.3%)	284(56.1%)	273(54.2%)	313(61.6%)	

Quartile 1:-5.20 to 0.94;Quartile 2:0.95,1.95;Quartile 3:1.96 to 2.69;Quartile 4:2.70 to 5.68

Supplementary Table 2 Baseline characteristics of the Community Cohort Study of Nervous System Diseases (CCSNSD) project population across depression status

Characteristic	Non-Depression(n=1549)	Depression(n=473)	P-Value
Age (years)			0.541
	65.69±0.17	65.93±0.16	
Sex			<0.001
Male	626(40.4%)	149(31.5%)	
Female	923(59.6%)	324(68.5%)	
BMI (kg/m ²)			0.411
BMI<18.50 (underweight)	39(2.5%)	17(3.6%)	
18.50≤BMI<24.00 (normal weight)	593(38.3%)	173(36.6%)	
24.00≤BMI<28.00 (overweight)	623(40.2%)	183(38.7%)	
BMI≥28.00 (obese)	294(19.0%)	100(21.1%)	
Employment			0.014
No	1305(84.2%)	420(88.8%)	
Yes	244(15.8%)	53(11.2%)	
Education			0.873
Illiteracy	385(24.9%)	112(23.7%)	
Primary school	495(32.0%)	154(32.6%)	
Junior high school/above	669(43.2%)	207(43.8%)	
Tobacco Smoking			0.472
No	1295(83.6%)	402(85.0%)	
Yes	254(16.4%)	71(15.0%)	
Alcohol Drinking			0.257
No	1387(89.5%)	432(91.3%)	
Yes	162(10.5%)	41(8.7%)	
Physical activities			<0.001
No	1009(65.1%)	233(49.3%)	
Yes	540(34.9%)	240(50.7%)	
Diabetes			0.412
No	801(51.7%)	237(50.1%)	
Yes	748(48.3%)	236(49.9%)	
Hypertension			0.334
No	628(40.5%)	180(38.1%)	
Yes	921(59.5%)	293(61.9%)	

Supplementary Table 3 Nutrient content of study participants.

Characteristic	Median(IQR)		p-Value
	Non-depression (n=1563)	Depression (n=459)	
Carbohydrates (g)	192.21(159.62-235.27)	194.70(161.45-237.93)	0.444
Protein (g)	53.61(43.04-66.12)	54.53(43.69-67.67)	0.373
Total fat (g)	34.77(27.09-44.23)	35.21(27.51-45.62)	0.412
β-Carotene (μg)	1459.28(748.00-2677.97)	1560.46(795.40-2738.40)	0.300
Fiber (g)	8.70(6.38-11.54)	8.87(6.61-11.83)	0.150
Cholesterol (mg)	389.57(233.05-436.60)	388.02(238.10-434.77)	0.989
Saturated fat (g)	4.00(2.58-6.02)	4.18(2.63-6.05)	0.655
Monounsaturated fat (g)	5.84(4.17-7.64)	5.98(4.14-7.75)	0.618
Polyunsaturated fats (g)	4.63(2.79-6.93)	4.92(2.84-7.07)	0.475
Niacin (mg)	8.83(6.85-10.97)	8.84(6.95-11.13)	0.702
Thiamine (mg)	0.71(0.56-0.89)	0.72(0.58-0.89)	0.506
Riboflavin (mg)	0.66(0.51-0.83)	0.67(0.51-0.85)	0.324
Vitamin B12 (μg)	0.22(0.14-0.34)	0.22(0.14-0.32)	0.892
Vitamin B6 (mg)	0.07(0.05-0.10)	0.07(0.05-0.10)	0.182
Fe (mg)	15.58(12.20-19.11)	15.90(12.52-19.33)	0.409
Magnesium (mg)	215.78(165.89-266.09)	218.40(169.30-270.06)	0.166
Zinc (mg)	7.15(5.66-8.68)	7.29(5.77-8.83)	0.383
Selenium (μg)	40.42(33.25-48.11)	40.86(32.89-49.39)	0.511
Vitamin A (RE)	430.36(283.91-660.48)	443.76(274.19-683.98)	0.505
Vitamin C (mg)	49.68(27.47-84.84)	52.51(28.11-89.54)	0.482
Vitamin E (mg)	11.74(8.24-14.95)	12.07(8.26-15.81)	0.177
Folic acid (μg)	115.79(83.57-153.99)	119.97(85.02-159.85)	0.370

