

Table 1 – Comparison of quantitative variables between depressed groups (cases) and control groups

Quantitative variables	Controls	Cases	P-value
Years of education*	12(12-16)	12(8-14)	0.04
Family Number*	4(3-4)	4(3-4)	0.2
Birth rank*	3(1-4)	3(2-4)	0.6
Number of living children*	1(0-2)	1(0-2.25)	0.2
Energy*	2477(1917-3096)	2610(2122-3293)	0.06
Cigarette use (No./week)**	8.2±2.8	2.6±1.6	0.09
Hookah use (times/week) **	0.4±0.22	0.08±0.02	0.6
BMI (kg/m ²)***	26.4±0.49	26.4±0.37	0.9

BMI: body mass index

* Median (IQR) for quantitative non-parametric data with skewness > 0.5 - Mann-Whitney test

**Mean ± SE for quantitative non-parametric distribution variable - Mann-Whitney test

*** Mean ± SE for quantitative normal distribution variable - Independent samples T test

Table 2 – Comparison of qualitative variables between non-depressed and depressed groups

Qualitative variables	categorizes	Control No. (%)	Cases No. (%)	P* _{value}
Marital status	Single	67(67.7)	32(32.3)	0.2
	Married and living with spouse	143(68.1)	67(31.9)	
	Married and living apart from spouse, divorced or Widow	11 (50.0)	11(50.0)	
Depression history	No	77(27.9)	199(72.1)	<0.001
	Yes	22(40)	33(60)	
Job	employees	42(77.8)	12(22.2)	0.01
	Housekeeper &retired	104(60.1)	69(39.9)	
	free job	32(66.7)	16(33.3)	
	students	38(80.9)	9(19.1)	
Periods of unemployment in the past 5 years	0	99(75.6)	32(24.4)	0.01
	<6 months	5(100)	0(0)	
	≥6 months	19(54.9)	13(40.6)	
	house worker	98(60.1)	65(39.9)	
Distressing life events in the last 6 months	no	174(74.4)	60(25.6)	0.001
	yes	47(49.5)	48(50.5)	
Distressing childhood events	no	171(71.0)	70(29.0)	0.01
	yes	50(56.2)	39(43.8)	
Physical activity (MET-h/day)	Very light	41(50)	41(50)	0.004
	Light	56(68.3)	26(31.7)	
	medium	59(73.8)	31(26.2)	
	Intense	59(72.8)	22(27.2)	

* Chi-Square Test MET-h/day: metabolic equivalent hours per day

Table 3 – The comparison of the serum biochemical markers between case and control groups

Biochemical factors	Case (Mean±SE)	Control (Mean±SE)	P value *	P value **	OR(95% CI)
Folate (ng/ml)	5.8±0.3	7.7±0.28	<0.001	<0.001	0.54(0.38-0.75)
Vitamin B12(pg/ml)	550.9±55.1	954.9±57.7	<0.001	<0.001	0.996(0.993-0.998)
Hcy ¹ (μmol/l)	11.2±1.1	11.9±0.9	0.2	0.5	0.97(0.9-1.05)
Trp ² (μmol/l)	70.3±2.9	75.3±3.9	0.3	0.1	0.97(0.94-1.01)
Trp/CAA ³	0.113±0.003	0.104±0.002	0.02	0.5	1.46(0.45-4.76)

* T- test for Square, square root or logarithm

** Multiple logistic regression after adjusting for job, education, marital status, children number, smoking and hookah use, depression history, unemployment history in the past 5 year, tragic events in the past 6 months and the whole lifetime, energy intake, physical activity and dietary patterns.

¹ Homocystein ² Tryptophan ³ valine, leucine, tyrosine, phenylalanine and isoleucine (These amino acids compete for the same cerebral uptake mechanism)

Table 4 – Mediation analysis for the relation between dietary patterns and depression

Model		1 p value	2 p value	3 p value	OR(95% CI)
dietary patterns					
Healthy dietary pattern	Folate	0.028	0.10	<0.001	0.4(0.25-0.66)
	Vitamin B12	0.028	0.17	<0.001	0.995(0.993-0.998)
Unhealthy dietary pattern	Folate	0.020	0.30	<0.001	0.5(0.35-0.72)
	Vitamin B12	0.020	0.60	<0.001	0.995(0.993-0.998)

Model 1: Logistic regression model for studying the relation between depression and quartiles of dietary patterns

Model 2: Logistic regression model for studying the relation between quartiles of healthy dietary pattern and depression with mediation variables

Model 3: Logistic regression relationship between mediation variables and depression

All of 3 models were adjusted for job, education, marital status, children number, smoking and hookah use, depression history, unemployment history in the past 5 year, tragic events in the past 6 months and the whole lifetime, energy intake, physical activity and dietary patterns.