

Relationship between Dietary Inflammatory Index and Postpartum Depression in Exclusively Breastfeeding Women

Supplementary Materials:

Table S1: Dietary intakes of breastfeeding mothers across tertiles of the DII

Nutrients	DII Tertiles (Mean \pm SD)			P value ¹
	Q1	Q2	Q3	
Energy(kcal/d)	2271.93 \pm 545.34	1971.26 \pm 339.55	1784.06 \pm 479.47	<0.001*
Protein(g/d)	92.91 \pm 28.27	74.38 \pm 16.25	59.62 \pm 20.40	<0.001*
Fat(g/d)	85.21 \pm 20.07	87.33 \pm 12.79	99.55 \pm 24.67	<0.001*
Carbohydrate(g/d)	283.45 \pm 95.68	252.52 \pm 71.49	230.35 \pm 90.38	<0.001*
Cholesterol(mg/d)	499.32 \pm 234.99	663.01 \pm 338.93	711.58 \pm 299.85	<0.001*
Dietary Fiber(g/d)	12.99 \pm 4.83	8.14 \pm 2.38	4.74 \pm 2.29	<0.001*
Vitamin A(μ g RE/d)	658.76 \pm 265.50	406.45 \pm 146.82	275.57 \pm 112.19	<0.001*
Vitamin B1(mg/d)	0.81 \pm 0.24	0.62 \pm 0.13	0.48 \pm 0.15	<0.001*
Vitamin B2(mg/d)	1.49 \pm 0.58	1.16 \pm 0.38	0.90 \pm 0.46	<0.001*
Niacin(mg/d)	23.39 \pm 7.41	18.44 \pm 4.27	15.68 \pm 4.68	<0.001*
Vitamin C(mg/d)	126.69 \pm 58.50	65.79 \pm 25.21	37.03 \pm 20.37	<0.001*
Vitamin E(mg/d)	18.80 \pm 8.38	14.02 \pm 3.18	9.42 \pm 2.65	<0.001*
Iron(mg/d)	22.82 \pm 7.32	17.46 \pm 5.15	12.76 \pm 5.08	<0.001*
Zinc(mg/d)	10.98 \pm 3.38	8.17 \pm 1.81	6.18 \pm 2.02	<0.001*
Saturated fatty acid(g/d)	36.34 \pm 9.72	36.34 \pm 5.98	41.05 \pm 10.34	<0.001*
Monounsaturated fatty acids(g/d)	43.49 \pm 10.32	38.09 \pm 5.81	37.90 \pm 8.56	<0.001*
Polyunsaturated fatty acids(g/d)	11.93 \pm 7.06	9.22 \pm 1.94	8.38 \pm 1.97	<0.001*
Folate(μ g/d)	446.64 \pm 151.07	318.54 \pm 80.10	204.54 \pm 144.16	<0.001*

DII, Dietary inflammation index.

1 One-way ANOVA for continuous variables.

* $P < 0.05$.

Table S2: Risk factors associated with PPD among exclusively breastfeeding women (n= 293)

Variables		β	Wald χ^2	OR(95%CI)	P value ¹
Crude Model	DII groups				0.024*
	Q1 VS Q3	-0.66	4.69	0.52(0.29, 0.94)	0.030*
	Q2 VS Q3	-0.78	6.66	0.46(0.25, 0.83)	0.010*
Model1	Age groups (years)				0.344
	≤ 25 VS 36 ~ 45	-0.19	0.09	0.83(0.25, 2.74)	0.759
	26 ~ 35 VS 36 ~ 45	0.32	0.41	1.381(0.51, 3.70)	0.522

Model 2	DII groups				0.016*
	Q1 VS Q3	-0.69	4.59	0.50(0.27, 0.94)	0.032*
	Q2 VS Q3	-0.90	7.77	0.406(0.21, 0.77)	0.005*
	Educational levels				0.004*
	Junior high school and below VS				
	Postgraduate and above	2.54	4.72	12.69(1.28, 125.69)	0.030*
	Specialized degree VS				
	Postgraduate and above	1.00	5.35	2.72(1.17, 6.36)	0.021*
	Bachelor's degree VS				
	Postgraduate and above	0.17	0.17	1.186(0.520, 2.70)	0.685
	Occupational levels				
	Unemployed VS	0.71	6.39	0.49(0.29, 0.85)	0.011*
	Employed				
	Number of children				
	1 VS ≥ 2	0.65	5.62	1.91(1.12, 3.26)	0.018*
	Age groups(years)				0.413
	≤ 25 VS 36~45	0.03	0.00	1.03 (0.29, 3.67)	0.963
	26~35 VS 36~45	0.46	0.73	1.584(0.55, 4.55)	0.392
	DII groups				0.013*
	Q1 VS Q3	-0.75	4.72	0.47 (0.24, 0.93)	0.030*
	Q2 VS Q3	-0.98	8.12	0.38(0.19, 0.74)	0.004*
	Educational levels				0.031*
	Junior high school and below VS				
	Postgraduate and above	2.38	3.84	10.84(1.00, 117.56)	0.05*
	Specialized degree VS				
	Postgraduate and above	0.85	3.28	2.341(0.93, 5.88)	0.07
	Bachelor's degree VS				
	Postgraduate and above	0.17	0.15	1.187(0.49, 2.86)	0.703
	Occupational levels				
	Unemployed VS	-0.74	6.19	0.48(0.27, 0.86)	0.013*
	Employed				
	Number of children				
	1 VS ≥ 2	0.74	6.27	2.094(1.17, 3.74))	0.012*
	Number of caregivers				0.025*
	1 VS ≥ 3	1.37	7.38	3.93(1.46, 10.55)	0.007*
	2 VS ≥ 3	0.68	3.15	1.98(0.93, 4.19))	0.076
	PSSS score levels				
	Low to medium social support VS	0.64	4.43	1.893(1.05, 3.43)	0.035*

High social support PSQI score levels Good sleep quality VS Moderate or poor sleep quality	-0.75	6.64	0.47 (0.27, 0.84)	0.010*
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PSSS, Perceived Social Support Scale. PSQI, Pittsburgh Sleep Quality Index. DII, dietary inflammatory index. PPD, postpartum depression.

1 Binary logistic regression.

Crude Model: Unadjusted for any covariate.

Mode 1: Adjusted age(≤ 25 , $26 \sim 35$, $36 \sim 45$), educational levels (junior high school and below, specialized degree, bachelor's degree, postgraduate and above), occupational levels (employed, unemployed), number of children ($1, \geq 2$).

Model 2: Adjusted for age(≤ 25 , $26 \sim 35$, $36 \sim 45$), educational levels (junior high school and below, specialized degree, bachelor's degree, postgraduate and above), occupational levels (employed, unemployed), number of children ($1, \geq 2$), number of postpartum caregivers ($1, 2, \geq 3$), PSSS score level (low to medium social support, high social support) and PSQI score level (good sleep quality, moderate or poor sleep quality).

* $P < 0.05$.