

1 Table S1. Logistic regression analysis of the correlation between dietary fiber and the TG change from first trimester to third trimester in the control group.

Variety	Quartile	g/day	TG change				TG change			
			< 25 percentile		(25 - 75)		>75 percentile			
			<i>OR</i>	<i>P</i>	<i>aOR</i>	<i>P</i>	<i>OR</i>	<i>P</i>	<i>aOR</i>	<i>P</i>
Total fiber	< 25 percentile	8.95 (3.13-11.28)	1.34 (0.54-3.30)	0.530	1.30 (0.52-3.25)	0.571	0.50 (0.19-1.33)	0.165	0.51 (0.19-1.36)	0.176
	25-75 percentile	14.53 (11.39-17.97)	1		1		1		1	
	>75 percentile	24.02 (>18.09)	1.22 (0.47-3.15)	0.681	1.19 (0.46-3.09)	0.720	0.63 (0.24-1.62)	0.334	0.62 (0.24-1.62)	0.332
Cereal fiber	< 25 percentile	1.78 (0.87-2.24)	1.72 (0.70-4.25)	0.235	1.73 (0.69-4.36)	0.243	1.08 (0.41-2.81)	0.883	1.15 (0.43-3.06)	0.787
	25-75 percentile	3.22	1		1		1		1	
	>75 percentile	6.14 (4.29-11.9)	0.70 (0.26-1.91)	0.235	0.69 (0.25-1.90)	0.474	0.99 (0.41-2.40)	0.974	0.99 (0.41-2.43)	0.989
Vegetables fiber	< 25 percentile	1.95 (0.58-2.70)	0.82 (0.31-2.19)	0.697	0.84 (0.32-2.24)	0.728	0.80 (0.32-1.96)	0.618	0.80 (0.33-1.98)	0.636

	25-75 percentile	4.14 (2.74-6.13)	1		1		1	1	1	
	>75 percentile	9.28 (6.23-21.20)	1.69 (0.69-4.17)	0.254	1.72 (0.69-4.25)	0.243		0.80 (0.30-2.13)	0.660	0.80 (0.30-2.12)
Fruit fiber	< 25 percentile	1.03 (0.05-1.54)	1.00 (0.40-2.49)	0.996	0.98 (0.39-2.48)	0.973		0.84 (0.32-2.21)	0.721	0.86 (0.33-2.28)
	25-75 percentile	2.55 (1.54-3.88)			1		1			1
	>75 percentile	5.69 (3.90-11.69)	0.73 (0.27-2.00)	0.545	0.70 (0.25-1.93)	0.491		1.32 (0.54-3.21)	0.541	1.36 (0.55-3.36)
Other fiber	< 25 percentile	1.14 (0.12-2.01)	1.26 (0.49-3.28)	0.635	1.31 (0.50-3.43)	0.580		1.64 (0.65-4.11)	0.295	1.64 (0.65-4.14)
	25-75 percentile	3.24 (2.08-4.82)								
	>75 percentile	8.69 (>4.85)	2.52 (0.98-6.50)	0.056	2.66 (1.02-6.92)	0.046		2.90 (1.13-7.44)	0.027	2.89 (1.12-7.45)

2 TG: triglyceride. Adjusted maternal age and pre-pregnant Body Mass Index

Table S2. Comparison of lipid profiles between GDM women in the intervention and control groups.

Variable		<i>GDM from</i>	<i>GDM from</i>	<i>t</i>	<i>P</i>
		<i>Intervention group</i> (<i>n=49</i>)	<i>Control group</i> (<i>n=57</i>)		
		Mean±SD	Mean±SD		
CHOL	First trimester	4.84±0.90	4.78±0.67	0.375	0.708
	Second trimester	5.79±1.03	5.80±0.89	-0.032	0.975
	Third trimester	6.04±0.96	6.13±0.97	-0.478	0.634
	Changes in pregnancy*	1.23±0.78	1.30±0.91	-0.378	0.700
TG	First trimester	1.77±0.65	1.80±0.78	-0.207	0.837
	Second trimester	2.57±0.82	2.53±0.86	0.255	0.799
	Third trimester	3.18±1.03	3.31±1.09	-0.620	0.536
	Changes in pregnancy*	1.43±0.92	1.48±0.82	-0.286	0.775
HDL	First trimester	1.73±0.41	1.76±0.37	-0.605	0.547
	Second trimester	2.06±0.44	2.03±0.46	0.408	0.684
	Third trimester	1.95±0.36	1.98±0.37	-0.375	0.709
	Changes in pregnancy*	0.23±0.31	0.18±0.28	0.827	0.410
LDL	First trimester	2.73±0.71	2.63±0.62	0.817	0.416
	Second trimester	3.20±0.84	3.22±0.73	-0.089	0.929
	Third trimester	3.44±0.83	3.49±0.94	-0.282	0.779
	Changes in pregnancy*	0.75±0.70	0.83±0.85	-0.553	0.582

SD: standard deviation; CHOL: cholesterol; TG: triglyceride; HDL: high-density lipoprotein; LDL: low-density lipoprotein

* “Changes in pregnancy” was calculated as the difference between lipid levels in the third trimester and those in the first trimester

Table S3. Comparison of blood glucose and HbA1c at different time points between the intervention and control groups using the Per-Protocol (PP) analysis.

variable	<i>Intervention group</i>	<i>Control group</i>	<i>t</i>	<i>P</i>
	Mean±SD	Mean±SD		
Fasting blood glucose at first trimester	4.86±0.46	4.83±0.35	0.67	0.51
HbA1C at first trimester	5.44±0.66	5.41±0.49	0.50	0.62
OGTT-0H at second trimester	4.43±0.49	4.38±0.47	0.95	0.34
OGTT-1H at second trimester	8.57±1.77	8.65±1.63	-0.49	0.63
OGTT-2H at second trimester	7.26±1.53	7.28±1.48	-0.11	0.91
HbA1C at second trimester	5.14±0.35	5.08±0.31	1.78	0.08
Fasting blood glucose at third trimester	4.69±0.5	4.7±0.47	-0.12	0.90
HbA1C at third trimester	5.44±0.37	5.39±0.35	1.2	0.23

HbA1C: glycosylated hemoglobin; SD: standard deviation; OGTT: oral glucose tolerance test

Table S4. Comparison of lipid profiles between the intervention and control groups using PP analysis.

Variable		<i>Intervention group</i>	<i>Control group</i>	<i>t</i>	<i>P</i>
		Mean±SD	Mean±SD		
CHOL	First trimester	4.74±0.81	4.79±0.72	-0.62	0.54
	Second trimester	5.85±0.95	5.81±0.88	0.37	0.71
	Third trimester	6.11±1.02	6.14±1.01	-0.28	0.78
	Changes in pregnancy*	1.39±0.91	1.35±0.84	0.38	0.71
TG	First trimester	1.67±0.68	1.67±0.65	0.07	0.94
	Second trimester	2.58±1.01	2.51±0.82	0.67	0.5
	Third trimester	3.28±1.42	3.27±1.24	0.05	0.96
	Changes in pregnancy*	1.61±1.16	1.58±0.99	0.21	0.83
HDL	First trimester	1.79±0.39	1.82±0.35	-1.03	0.31
	Second trimester	2.09±0.46	2.06±0.42	0.69	0.49
	Third trimester	2.01±0.41	2.01±0.42	0.07	0.94
	Changes in pregnancy*	0.22±0.31	0.19±0.32	1	0.32
LDL	First trimester	2.61±0.68	2.63±0.63	-0.34	0.73
	Second trimester	3.22±0.77	3.23±0.78	-0.15	0.88
	Third trimester	3.45±0.88	3.49±0.98	-0.33	0.74
	Changes in pregnancy*	0.87±0.84	0.86±0.84	0.08	0.93

SD: standard deviation; CHOL: cholesterol; TG: triglyceride; HDL: high-density lipoprotein; LDL: low-density lipoprotein

* “Changes in pregnancy” was calculated as the difference between lipid levels in the third trimester and those in the first trimester.

Table S5. Comparison of blood glucose and HbA1c at different time points between GDM women in the intervention and control groups using PP analysis.

variable	<i>GDM from Intervention group</i>	<i>GDM from Control group</i>	<i>t</i>	<i>P</i>
	Mean±SD	Mean±SD		
Fasting blood glucose at first trimester	5.20±0.48	4.98±0.39	2.520	0.013
HbA1C at first trimester	5.56±0.91	5.53±0.30	0.229	0.820
OGTT-0H at second trimester	4.88±0.49	4.70±0.50	1.813	0.073
OGTT-1H at second trimester	10.44±1.50	10.21±1.31	0.817	0.416
OGTT-2H at second trimester	8.78±1.60	8.65±1.52	0.424	0.672
HbA1C at second trimester	5.34±0.38	5.18±0.33	2.343	0.021
Fasting blood glucose at third trimester	5.00±0.53	4.91±0.49	0.855	0.395
HbA1C at third trimester	5.54±0.41	5.47±0.38	0.842	0.402

HbA1C: glycosylated hemoglobin; SD: standard deviation; OGTT: oral glucose tolerance test

Table S6. Comparison of lipid profiles between GDM women in the intervention and control groups using PP analysis.

Variable		<i>GDM from</i>	<i>GDM from</i>	<i>t</i>	<i>P</i>
		<i>Intervention group</i>	<i>Control group</i>		
		Mean±SD	Mean±SD		
CHOL	First trimester	4.84±0.90	4.78±0.67	0.375	0.708
	Second trimester	5.79±1.03	5.80±1.00	-0.032	0.975
	Third trimester	6.04±0.98	6.13±0.97	-0.469	0.640
	Changes in pregnancy*	1.23±0.79	1.29±0.95	-0.379	0.705
TG	First trimester	1.77±0.65	1.80±0.78	-0.207	0.837
	Second trimester	2.57±0.82	2.53±0.86	0.255	0.799
	Third trimester	3.18±1.05	3.31±1.12	-0.622	0.535
	Changes in pregnancy*	1.43±0.94	1.47±0.85	-0.269	0.789
HDL	First trimester	1.73±0.41	1.76±0.37	-0.605	0.547
	Second trimester	2.06±0.44	2.03±0.46	0.408	0.684
	Third trimester	1.95±0.37	1.98±0.38	-0.368	0.714
	Changes in pregnancy*	0.23±0.32	0.18±0.30	0.793	0.429
LDL	First trimester	2.73±0.71	2.63±0.62	0.817	0.416
	Second trimester	3.20±0.84	3.22±0.73	-0.089	0.929
	Third trimester	3.44±0.85	3.49±0.96	-0.272	0.786
	Changes in pregnancy*	0.74±0.73	0.83±0.88	-0.551	0.583

SD: standard deviation; CHOL: cholesterol; TG: triglyceride; HDL: high-density lipoprotein; LDL: low-density lipoprotein

* “Changes in pregnancy” was calculated as the difference between lipid levels in the third trimester and those in the first trimester