

Table S1. Pregnancy and perinatal outcome of women included in the study (n=680).

Characteristics	Usual care	Mediterranean diet	p value
	n=349	n=331	
Gestational age at recruitment (weeks)	20.8 (0.7)	20.8 (0.6)	0.64
<i>Pregnancy complications</i>			
Preeclampsia	32 (9.2%)	19 (5.7%)	0.09
Mild	26 (7.5%)	13 (3.9%)	0.05
Severe	6 (1.7%)	6 (1.8%)	0.93
Prenatally diagnosed SGA	31 (8.9%)	18 (5.4%)	0.08
Threatened preterm labor	8 (2.3%)	11 (3.3%)	0.42
Preterm premature rupture of membranes	9 (2.6%)	8 (2.4%)	0.88
Stillbirth	1 (0.3%)	0 (0.0%)	0.33
<i>Delivery outcome</i>			
Gestational age at delivery (weeks)	39.3 (1.9)	39.4 (1.8)	0.21
Preterm birth	20 (5.7%)	22 (6.6%)	0.63
Induction of labor	181 (52.0%)	163 (49.2%)	0.47
Mode of delivery			
Vaginal delivery	204 (58.6%)	174 (52.6%)	0.11
Cesarean section	111 (31.9%)	122 (36.9%)	0.17
Operative vaginal delivery	33 (9.5%)	35 (10.6%)	0.64
Maternal anesthesia ^a	327 (94.2%)	309 (93.4%)	0.63
Antibiotics during labor ^b	157 (45.2%)	166 (50.6%)	0.17
Delivery complications ^{c,d}	20 (5.8%)	29 (8.9%)	0.12
<i>Neonatal outcome</i>			
Female gender	163 (46.8%)	165 (49.8%)	0.43
Birthweight (g)	3219 (2817-3501)	3250 (2992-3520)	0.12
Birthweight (percentile)	40.8 (30.4)	42.7 (29.1)	0.41
Small for gestational age	75 (21.6%)	46 (13.9%)	0.01
Severe SGA (<3 rd centile)	31 (8.9%)	15 (4.5%)	0.02

Apgar 5 minutes <7 ^e	1 (0.3%)	1 (0.3%)	0.10
pH umbilical artery ^f	7.2 (0.1)	7.2 (0.1)	0.25
Neonatal resuscitation	17 (4.9%)	12 (3.6%)	0.42
NICU admission	22 (6.3%)	18 (5.4%)	0.63

PE: preeclampsia; SGA: small for gestational age; NICU: Neonatal intensive care unit.

Data are expressed as median (IQR) or mean (SD) or n (%).

^aData available for 678 pregnancies.

^bData available for 675 pregnancies.

^cData available for 674 pregnancies.

^dPlacental abruptio, shoulder dystocia, postpartum hemorrhage, postpartum infection

^eData available for 664 pregnancies.

^fData available for 459 pregnancies.

Table S2. Changes in dietary key-foods intake and Mediterranean diet adherence evaluated at baseline and final visits according to intervention groups.

		Mediterranean diet	Usual Care		Mediterranean diet vs. Usual care
				<i>P^c</i>	<i>Difference (95% CI)</i>
Extra virgin olive oil – g/d	Baseline ^a	34.9 (18.7)	32.5 (19.4)		
	Final ^b	42.6 (0.96)**	39.3 (0.88)**	0.011	3.34 (0.78 to 5.90)
Refined olive oil – g/d	Baseline ^a	7.09 (13.7)	7.94 (15.2)		
	Final ^b	2.98 (0.70)**	5.56 (0.64)*	0.007	-2.57 (-4.43 to -0.72)
Total nuts – g/d	Baseline ^a	21.0 (21.2)	17.8 (18.0)		
	Final ^b	27.5 (1.16)**	23.2 (1.05)**	0.006	4.30 (1.23 to 7.38)
Vegetables – g/d	Baseline ^a	289.8 (129.8)	286.5 (127.8)		

	Final ^b	321.1 (6.40)**	298.4 (5.80)	0.008	22.8 (5.83 to 39.7)
Legumes – g/d	Baseline ^a	52.7 (41.8)	50.8 (34.8)		
	Final ^b	68.4 (2.76)**	63.4 (2.50)**	0.173	5.06 (-2.23 to 12.4)
Fruits – g/d	Baseline ^a	326.2 (169.9)	318.0 (162.2)		
	Final ^b	372.2 (11.2)**	340.8 (10.2)	0.039	31.3 (1.65 to 61.1)
Refined cereals – g/d	Baseline ^a	62.6 (47.3)	63.6 (42.1)		
	Final ^b	37.7 (2.26)**	51.2 (2.07)**	<0.001	-13.5 (-19.5 to -7.45)
Whole grain cereals – g/d	Baseline ^a	41.9 (44.0)	35.4 (36.8)		
	Final ^b	55.7 (2.34)**	46.4 (2.12)**	0.003	9.36 (3.15 to 15.6)
Fish or seafood – g/d	Baseline ^a	72.0 (42.2)	72.4 (43.3)		
	Final ^b	89.6 (2.51)**	78.8 (2.89)*	0.001	10.9 (4.23 to 17.5)
Fat fish – g/d	Baseline ^a	14.9 (16.4)	15.3 (16.1)		
	Final ^b	26.9 (1.20)**	19.7 (1.09)**	<0.001	7.19 (4.01 to 10.4)
Lean meat – g/d	Baseline ^a	71.3 (38.5)	68.9 (37.1)		
	Final ^b	77.8 (2.4)**	72.2 (1.87)	0.043	5.61 (0.18 to 11.0)
Red meat – g/d	Baseline ^a	46.5 (35.0)	50.2 (36.7)		
	Final ^b	42.0 (1.76)*	46.2 (1.61)	0.079	-4.19 (-8.87 to 0.48)
Processed meat – g/d	Baseline ^a	32.0 (27.6)	33.6 (26.1)		
	Final ^b	31.7 (1.20)	30.0 (1.09)*	0.299	1.69 (-1.50 to 4.87)
Pastries, cakes, or sweets – g/d	Baseline ^a	38.0 (32.9)	42.5 (37.5)		
	Final ^b	33.2 (1.86)*	35.7 (1.68)**	0.315	-2.52 (-7.44 to 2.39)
Dairy products – g/d	Baseline ^a	337.5 (214.7)	322.6 (198.5)		
	Final ^b	431.5 (13.0)**	397.6 (11.7)**	0.053	33.9 (-0.38 to 68.2)
Mediterranean diet score	Baseline ^a	7.97 (2.50)	7.46 (2.62)		
	Final ^b	12.1 (0.12)**	7.86 (0.12)*	<0.001	4.26 (3.92 to 4.60)

^aBaseline values are observed means (SD). ^bFinal values are baseline-adjusted (least-squares) means (SE) and comparison among groups done with ANCOVA analysis. *P<0.05 and **P<0.001 final from baseline comparison.
^cANCOVA analysis.

Table S3. Changes in nutrients intake and Mediterranean diet adherence evaluated at baseline and final visits according to intervention groups.

		Mediterranean diet	Usual Care		Mediterranean diet vs. Usual care
				<i>P^c</i>	<i>Difference (95% CI)</i>
Energy – kcal/d	Baseline ^a	2468 (520.8)	2420 (509.1)		
	Final ^b	2526 (27.4)*	2502 (24.9)*	0.517	24.0 (-48.6 to 96.6)
Protein – kcal/d	Baseline ^a	103.9 (25.4)	102.7 (26.2)		
	Final ^b	113.6 (1.47)**	108.2 (1.33)**	0.007	5.36 (1.47 to 9.24)
Carbohydrate – g/d	Baseline ^a	222.9 (62.1)	216.0 (58.1)		
	Final ^b	214.5 (3.01)	217.0 (2.74)	0.545	-2.47 (-10.4 to 5.52)
Fiber – g/d	Baseline ^a	33.8 (11.1)	32.9 (10.8)		
	Final ^b	36.4 (0.59)**	34.8 (0.54)*	0.054	1.55 (-0.02 to 3.12)
Total fat – g/d	Baseline ^a	128.8 (30.6)	127.0 (30.0)		
	Final ^b	134.8 (1.65)**	133.4 (1.51)**	0.530	1.41 (-2.98 to 5.79)
SFA – g/d	Baseline ^a	34.7 (10.3)	34.5 (9.41)		
	Final ^b	35.1 (0.53)	35.8 (0.48)*	0.343	-0.68 (-2.08 to 0.73)
MUFA – g/d	Baseline ^a	61.9 (15.0)	61.2 (15.2)		
	Final ^b	64.3 (0.81)*	63.9 (0.73)*	0.685	0.44 (-1.69 to 2.58)
PUFA – g/d	Baseline ^a	22.7 (8.38)	22.0 (7.81)*		
	Final ^b	25.3 (0.48)**	23.8 (0.44)*	0.018	1.53 (0.26 to 2.80)
α-Linoleic acid – g/d	Baseline ^a	14.8 (6.33)	14.5 (5.74)		

	Final ^b	16.6 (0.36)**	15.7 (0.33)*	0.090	0.83 (-0.13 to 1.78)
α -Linolenic acid – g/d	Baseline ^a	1.43 (0.65)	1.38 (0.60)		
	Final ^b	1.96 (0.05)**	1.59 (0.04)**	<0.001	0.37 (0.25 to 0.50)
EPA – g/d	Baseline ^a	0.16 (0.11)	0.16 (0.11)		
	Final ^b	0.23 (0.01)**	0.18 (0.01)**	<0.001	0.04 (0.02 to 0.06)
DHA – g/d	Baseline ^a	0.32 (0.25)	0.33 (0.26)		
	Final ^b	0.50 (0.02)**	0.39 (0.02)**	<0.001	0.10 (0.06 to 0.15)
<i>Trans</i> -FA – g/d	Baseline ^a	1.66 (1.22)	1.66 (1.13)		
	Final ^b	1.31 (0.06)**	1.55 (0.05)	0.003	-0.24 (-0.40 to -0.08)
Cholesterol – mg/d	Baseline ^a	311.8 (98.8)	332.0 (101.4)		
	Final ^b	344.1 (5.25)*	332.8 (4.78)	0.111	11.3 (-2.60 to 25.2)

^aBaseline values are observed means (SD). ^bFinal values are baseline-adjusted (least-squares) means (SE) and comparison among groups done with ANCOVA analysis. *P<0.05 and **P<0.001 final from baseline comparison.

^cANCOVA analysis.