

S2 Table. Odds ratios (95% CIs) for subsequent risk of GDM according to quartiles of plasma phospholipid n-3 PUFA, n-6 PUFA, and PUFA ratios at gestational weeks 10-14 and 15-26¹

	Gestational weeks 10-14		Gestational weeks 15-26	
	Crude	Multivariable ¹	Crude	Multivariable ¹
n-3 PUFAs				
18:3n-3 (alpha-linolenic acid, ALA)				
Q1	Reference	Reference	Reference	Reference
Q2	1.32 (0.66, 2.63)	1.79 (0.79, 4.05)	0.59 (0.29, 1.20)	0.78 (0.34, 1.79)
Q3	1.38 (0.69, 2.78)	1.74 (0.79, 3.84)	1.23 (0.63, 2.44)	1.77 (0.79, 3.94)
Q4	1.30 (0.65, 2.60)	1.86 (0.83, 4.13)	0.76 (0.38, 1.55)	1.12 (0.48, 2.60)
<i>P</i> -for-trend ²	0.609	0.493	0.700	0.542
20:5n-3 (eicosapentaenoic acid, EPA)				
Q1	Reference	Reference	Reference	Reference
Q2	0.47 (0.21, 1.06)	0.56 (0.24, 1.31)	0.57 (0.28, 1.16)	0.60 (0.27, 1.37)
Q3	0.55 (0.23, 1.34)	0.62 (0.24, 1.59)	0.78 (0.39, 1.56)	0.70 (0.30, 1.61)
Q4	0.82 (0.34, 1.99)	0.83 (0.32, 2.16)	0.42 (0.18, 0.98)	0.49 (0.19, 1.26)
<i>P</i> -for-trend ²	0.998	0.852	0.117	0.275
22:5n-3 (docosapentaenoic acid, DPA)				
Q1	Reference	Reference	Reference	Reference
Q2	1.10 (0.55, 2.20)	0.92 (0.41, 2.03)	0.71 (0.34, 1.46)	0.72 (0.31, 1.68)
Q3	0.67 (0.31, 1.44)	0.53 (0.22, 1.28)	0.63 (0.30, 1.33)	0.79 (0.34, 1.82)
Q4	0.81 (0.38, 1.75)	1.13 (0.46, 2.79)	0.28 (0.11, 0.72)	0.29 (0.10, 0.85)
<i>P</i> -for-trend ²	0.597	0.852	0.035	0.120
22:6n-3 (docosahexaenoic acid, DHA)				
Q1	Reference	Reference	Reference	Reference
Q2	0.66 (0.32, 1.35)	0.90 (0.42, 1.93)	0.82 (0.41, 1.63)	0.95 (0.43, 2.09)
Q3	0.79 (0.41, 1.54)	0.93 (0.44, 1.94)	0.46 (0.21, 1.03)	0.52 (0.20, 1.32)
Q4	0.43 (0.20, 0.96)	0.63 (0.25, 1.56)	0.61 (0.27, 1.39)	0.69 (0.25, 1.93)
<i>P</i> -for-trend ²	0.230	0.672	0.170	0.406
Total n-3 PUFAs				
Q1	Reference	Reference	Reference	Reference
Q2	0.85 (0.43, 1.67)	1.03 (0.49, 2.17)	0.77 (0.39, 1.50)	0.83 (0.38, 1.79)
Q3	0.56 (0.26, 1.20)	0.77 (0.31, 1.87)	0.49 (0.21, 1.13)	0.55 (0.20, 1.55)
Q4	0.57 (0.28, 1.15)	0.59 (0.26, 1.32)	0.36 (0.15, 0.83)	0.36 (0.14, 0.98)
<i>P</i> -for-trend ²	0.230	0.493	0.035	0.120
n-6 PUFAs				
18:2n-6 (linoleic acid, LA)				
Q1	Reference	Reference	Reference	Reference
Q2	0.80 (0.41, 1.56)	0.79 (0.36, 1.71)	0.82 (0.42, 1.60)	0.87 (0.41, 1.85)
Q3	1.01 (0.54, 1.90)	1.03 (0.50, 2.12)	0.78 (0.39, 1.55)	0.89 (0.40, 1.97)
Q4	0.68 (0.35, 1.31)	0.58 (0.27, 1.26)	0.91 (0.47, 1.79)	0.93 (0.41, 2.10)
<i>P</i> -for-trend ²	0.483	0.321	0.936	0.884
18:3n-6 (gamma-linoleic acid, GLA)				
Q1	Reference	Reference	Reference	Reference
Q2	1.40 (0.65, 3.01)	1.23 (0.52, 2.89)	1.25 (0.61, 2.55)	0.98 (0.45, 2.18)
Q3	2.12 (1.03, 4.36)	1.36 (0.61, 3.06)	1.27 (0.64, 2.50)	1.03 (0.47, 2.27)
Q4	2.63 (1.26, 5.49)	2.53 (1.12, 5.68)	0.89 (0.41, 1.91)	0.90 (0.37, 2.18)
<i>P</i> -for-trend ²	0.020	0.068	0.936	0.884
20:2n-6 (eicosadienoic acid, EDA)				
Q1	Reference	Reference	Reference	Reference

Q2	0.48 (0.24, 0.95)	0.61 (0.29, 1.28)	0.80 (0.40, 1.60)	0.91 (0.40, 2.06)
Q3	0.58 (0.29, 1.16)	0.65 (0.30, 1.38)	0.48 (0.23, 1.01)	0.58 (0.25, 1.32)
Q4	0.49 (0.23, 1.03)	0.53 (0.24, 1.18)	0.49 (0.23, 1.05)	0.62 (0.26, 1.49)
<i>P</i> -for-trend ²	0.275	0.312	0.109	0.416
20:3n-6 (dihomo-gamma-linolenic acid, DGLA)				
Q1	Reference	Reference	Reference	Reference
Q2	1.79 (0.83, 3.89)	1.59 (0.67, 3.75)	1.73 (0.64, 4.63)	1.67 (0.56, 4.92)
Q3	2.03 (0.89, 4.59)	2.36 (0.97, 5.75)	4.27 (1.64, 11.2)	3.76 (1.28, 11.1)
Q4	3.98 (1.77, 8.93)	3.42 (1.37, 8.54)	5.53 (2.07, 14.8)	5.12 (1.70, 15.4)
<i>P</i> -for-trend ²	0.008	0.056	0.001	0.008
20:4n-6 (arachidonic acid, AA)				
Q1	Reference	Reference	Reference	Reference
Q2	0.74 (0.40, 1.38)	0.61 (0.30, 1.25)	0.71 (0.35, 1.43)	0.72 (0.31, 1.66)
Q3	0.52 (0.25, 1.09)	0.43 (0.18, 1.04)	0.76 (0.35, 1.62)	0.83 (0.34, 2.03)
Q4	0.70 (0.36, 1.39)	0.63 (0.30, 1.32)	1.06 (0.51, 2.23)	1.04 (0.45, 2.43)
<i>P</i> -for-trend ²	0.325	0.312	0.939	0.884
22:4n-6 (docosatetraenoic acid, DTA)				
Q1	Reference	Reference	Reference	Reference
Q2	0.57 (0.26, 1.24)	0.72 (0.31, 1.68)	0.56 (0.29, 1.08)	0.76 (0.35, 1.65)
Q3	0.43 (0.18, 1.02)	0.44 (0.16, 1.20)	0.46 (0.21, 0.98)	0.47 (0.20, 1.13)
Q4	0.56 (0.22, 1.40)	0.56 (0.20, 1.59)	0.22 (0.09, 0.56)	0.30 (0.11, 0.83)
<i>P</i> -for-trend ²	0.294	0.321	0.004	0.060
22:5n-6 (docosapentaenoic acid, n6-DPA)				
Q1	Reference	Reference	Reference	Reference
Q2	2.29 (1.11, 4.72)	2.41 (1.04, 5.58)	1.23 (0.57, 2.65)	1.40 (0.57, 3.44)
Q3	1.53 (0.73, 3.24)	2.11 (0.89, 5.03)	1.41 (0.66, 2.99)	2.16 (0.87, 5.33)
Q4	1.46 (0.62, 3.41)	1.61 (0.62, 4.14)	1.77 (0.78, 4.00)	2.39 (0.93, 6.15)
<i>P</i> -for-trend ²	0.483	0.321	0.322	0.128
Total n-6 PUFAs				
Q1	Reference	Reference	Reference	Reference
Q2	0.77 (0.39, 1.52)	0.51 (0.23, 1.1 = 0.603)	1.25 (0.58, 2.68)	1.32 (0.55, 3.19)
Q3	0.97 (0.47, 2.02)	0.77 (0.32, 1.85)	0.97 (0.45, 2.09)	0.91 (0.38, 2.19)
Q4	0.91 (0.44, 1.86)	0.67 (0.29, 1.55)	1.48 (0.67, 3.26)	1.79 (0.69, 4.61)
<i>P</i> -for-trend ²	0.894	0.460	0.757	0.624
PUFA ratios				
Δ 6-Desaturase, 18:3n-6/18:2n-6				
Q1	Reference	Reference	Reference	Reference
Q2	1.21 (0.58, 2.54)	0.88 (0.38, 2.02)	2.06 (1.00, 4.23)	2.32 (0.97, 5.52)
Q3	1.49 (0.73, 3.07)	0.93 (0.42, 2.09)	1.65 (0.79, 3.43)	1.49 (0.64, 3.49)
Q4	2.03 (1.01, 4.08)	1.86 (0.86, 4.03)	0.95 (0.42, 2.18)	1.01 (0.39, 2.60)
<i>P</i> -for-trend ²	0.047	0.114	0.810	0.775
Δ 5-Desaturase, 20:4n-6/20:3n-6				
Q1	Reference	Reference	Reference	Reference
Q2	0.86 (0.47, 1.57)	1.08 (0.53, 2.18)	0.62 (0.30, 1.25)	0.69 (0.31, 1.55)
Q3	0.41 (0.20, 0.87)	0.45 (0.19, 1.05)	0.83 (0.42, 1.64)	0.92 (0.42, 1.98)
Q4	0.37 (0.17, 0.81)	0.35 (0.14, 0.84)	0.27 (0.11, 0.68)	0.22 (0.07, 0.67)
<i>P</i> -for-trend ²	0.015	0.030	0.048	0.078
DGLA/LA, 20:3n-6/18:2n-6				

	Reference	Reference	Reference	Reference
Q1				
Q2	3.18 (1.36, 7.45)	3.67 (1.45, 9.28)	1.93 (0.73, 5.13)	1.83 (0.60, 5.53)
Q3	2.17 (0.92, 5.12)	2.10 (0.83, 5.36)	3.01 (1.16, 7.83)	2.24 (0.72, 6.97)
Q4	5.80 (2.40, 14.0)	5.89 (2.25, 15.4)	4.72 (1.85, 12.1)	4.35 (1.47, 12.8)
<i>P</i> -for-trend ²	0.076	0.221	0.726	0.752

PUFA, polyunsaturated fatty acid; Q, quartile.

¹Adjusted for age (years), gestational age at blood collection (weeks), parity (nulliparous, multiparous), family history of diabetes (yes, no), and pre-pregnancy body mass index (<25.0, 25.0-29.9, 30.0-34.9, 35.0-44.9 kg/m²).

²*P*-for-trend was corrected using the false discovery rate method.