**Supplemental Table 1. Relative risks (RR) and 95% confidence intervals (95% CI) of GDM according to quartiles of calcium intake, after stratifying my selected maternal characteristics, Seattle and Tacoma, WA, Omega Cohort Study**

|  |  |
| --- | --- |
|  | Calcium Dietary Intake (mg/day) |
|  | Quartile 1(<795) | Quartile 2(795-1111) | Quartile 3(1112-1526) | Quartile 4(≥1527) | P-trend | >1st Quartile(≥795) | P-valueinteraction |
| Advanced Maternal Age (≥35 years) |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| No | 33 (5.9) | 16 (2.8) | 20 (3.7) | 22 (3.9) |  | 58 (3.5) |  |
| Yes | 25 (8.7) | 18 (6.2) | 18 (5.9) | 17 (5.8) |  | 53 (5.9) |  |
| RR (95% CI) - No | 1.0 (Ref) | 0.56 (0.30-1.03) | 0.62 (0.31-1.27) | 0.67 (0.24-1.90) | 0.377 | 0.58 (0.34-1.01) | 0.423 |
| RR (95% CI) - Yes | 1.0 (Ref) | 0.73 (0.38-1.40) | 0.65 (0.30-1.43) | 0.40 (0.14-1.12) | 0.114 | 0.74 (0.39-1.41) |  |
| Smoking status during pregnancy |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |   |  |   |  |
| No | 54 (6.7) | 31 (3.9) | 37 (4.6) | 35 (4.3) |  | 103 (4.3) |  |
| Yes | 4 (8.7) | 3 (5.7) | 1 (2.3) | 4 (10.0) |  | 8 (6.0) |  |
| RR (95% CI) - No | 1.0 (Ref.) | **0.60 (0.38-0.94)** | 0.63 (0.37-1.07) | 0.48 (0.22-1.05) | 0.068 | **0.62 (0.41-0.95)** | 0.603 |
| RR (95% CI) - Yes | 1.0 (Ref.) | 0.74 (0.09-5.89) | 0.31 (0.02-4.85) | 0.87 (0.03-30.30) | 0.759 | 0.60 (0.07-4.90) |  |
| Maternal Pre-pregnancy overweight (≥25kg/m2) |  |  |  |  |  |
| GDM Cases (%) |   |  |   |   |  |  |  |
| No | 29 (4.8) | 16 (2.5) | 25 (3.8) | 19 (3.0) |  | 60 (3.1) |  |
| Yes | 29 (12.1) | 18 (8.2) | 13 (6.8) | 20 (9.4) |  | 51 (8.2) |  |
| RR (95% CI) - No | 1.0 (Ref.) | 0.60 (0.32-1.14) | 0.74 (0.37-1.50) | 0.57 (0.20-1.66) | 0.364 | 0.66 (0.37-1.18) | 0.814 |
| RR (95% CI) - Yes | 1.0 (Ref.) | 0.69 (0.38-1.27) | 0.54 (0.25-1.18) | 0.61 (0.25-1.50) | 0.194 | 0.65 (0.36-1.17) |  |
| Physical activity during pregnancy |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| No | 6 (5.6) | 5 (5.2) | 4 (5.6) | 5 (5.4) |  | 14 (5.4) |  |
| Yes | 52 (7.0) | 29 (3.8) | 34 (4.4) | 34 (4.5) |  | 97 (4.2) |  |
| RR (95% CI) - Yes | 1.0 (Ref) | **0.58 (0.36, 0.93)** | 0.59 (0.34, 1.02) | 0.51 (0.23, 1.11) | 0.078 | **0.59 (0.38, 0.91)** | 0.409 |
| RR (95% CI) - No | 1.0 (Ref) | 1.14 (0.31, 4.22) | 1.58 (0.37, 6.78) | 1.15 (0.10, 13.85) | 0.761 | 1.26 (0.39-4.07) |  |
| Family history of diabetes  |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| No | 39 (5.4) | 21 (2.9) | 29 (3.9) | 28 (3.7) |  | 78 (3.5) |  |
| Yes | 19 (14.1) | 13 (11.1) | 9 (8.2) | 11 (11.0) |  | 33 (10.1) |  |
| RR (95% CI) - No | 1.0 (Ref) | **0.56 (0.32-0.97)** | 0.67 (0.36-1.25) | 0.47 (0.20-1.12) | 0.134 | 0.61 (0.37-1.02) | 0.491 |
| RR (95% CI) - Yes | 1.0 (Ref) | 0.88 (0.42-1.82) | 0.58 (0.24-1.42) | 1.05 (0.29-3.88) | 0.667 | 0.76 (0.39-1.49) |  |

Adjusted for energy intake, maternal age, race/ethnicity, educational attainment, cigarette smoking status, pre-pregnancy BMI, prenatal vitamin use, physical activity, family history of diabetes, alcohol and coffee consumption, sugar-sweetened soft drinks, red and processed meats, fatty fish and total fiber, dietary magnesium and Vitamin D intake.Each model adjusted for the above variables excluding the variable explored as effect modifier in each model.

**Supplemental Table 1 (cont). Relative risks (RR) and 95% confidence intervals (95% CI) of GDM according to quartiles of calcium intake, after stratifying my selected maternal characteristics, Seattle and Tacoma, WA, Omega Cohort Study (Continued)**

|  |  |
| --- | --- |
|  | Calcium Dietary Intake (mg/day) |
|  | Quartile 1(<795) | Quartile 2(795-1111) | Quartile 3(1112-1526) | Quartile 4(≥1527) | P-trend | >1st Quartile(≥795) | P-valueinteraction |
| Low fruit and vegetable (<4 serving /day) |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| Low  | 45 (7.1) | 20 (4.3) | 11 (3.0) | 16 (5.8) |  | 47 (4.3) |  |
| Higher | 13 (5.9) | 14 (3.6) | 27 (5.5) | 23 (4.0) |  | 64 (4.4) |  |
| RR (95% CI) - Lower | 1.0 (Ref) | 0.65 (0.36-1.17) | 0.47 (0.20-1.08) | 0.75 (0.24-2.37) | 0.247 | 0.58 (0.33-1.02) | 0.443 |
| RR (95% CI) - Higher  | 1.0 (Ref) | 0.66 (0.32-1.36) | 0.88 (0.41-1.88) | 0.57 (0.21-1.50) | 0.428 | 0.77 (0.39-1.49) |  |
| Low total fiber (<18.5 g/day) |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| Low  | 50 (6.9) | 20 (4.0) | 14 (3.6) | 13 (5.4) |  | 47 (4.1) |  |
| Higher | 8 (6.2) | 14 (4.0) | 24 (5.2) | 26 (4.2) |  | 64 (4.5) |  |
| RR (95% CI) - Lower | 1.0 (Ref) | 0.60 (0.34-1.08) | 0.62 (0.28-1.38) | 0.64 (0.18-2.22) | 0.292 | 0.61 (0.35-1.05) | 0.534 |
| RR (95% CI) - Higher  | 1.0 (Ref) | 0.76 (0.33-1.78) | 0.81 (0.33-1.95) | 0.61 (0.21-1.77) | 0.440 | 0.78 (0.35-1.74) |  |
| Low vitamin C (<109 mg/day) |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| Low  | 45 (7.0) | 22 (4.7) | 16 (4.5) | 17 (7.3) |  | 55 (5.2) |  |
| Higher | 13 (6.3) | 12 (3.1) | 22 (4.4) | 22 (3.6) |  | 56 (3.7) |  |
| RR (95% CI) - Lower | 1.0 (Ref) | 0.69 (0.40-1.19) | 0.64 (0.30-1.36) | 0.89 (0.28-2.85) | 0.480 | 0.66 (0.40-1.10) | 0.625 |
| RR (95% CI) - Higher  | 1.0 (Ref) | 0.53 (0.24-1.16) | 0.67 (0.30-1.47) | 0.50 (0.18-1.40) | 0.322 | 0.60 (0.29-1.21) |  |
| Low whole grain (<0.29 servings/day) |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| Low  | 45 (7.5) | 21 (4.5) | 18 (4.5) | 17 (4.8) |  | 56 (4.6) |  |
| Higher | 13 (5.2) | 13 (3.4) | 20 (4.4) | 22 (4.4) |  | 55 (4.1) |  |
| RR (95% CI) - Lower | 1.0 (Ref) | 0.68 (0.40-1.18) | 0.60 (0.31-1.19) | 0.48 (0.19-1.24) | 0.105 | 0.67 (0.39-1.14) | 0.929 |
| RR (95% CI) - Higher  | 1.0 (Ref) | 0.53 (0.25-1.15) | 0.74 (0.31-1.76) | 0.75 (0.23-2.45) | 0.764 | 0.61 (0.30-1.22) |  |
| Low magnesium (<282 mg/day) |  |  |  |  |  |  |
| GDM Cases (%) |  |  |  |  |  |  |  |
| Low  | 54 (6.9) | 21 (3.8) | 14 (4.7) | 5 (7.5) |  | 40 (4.4) |  |
| Higher | 4 (5.9) | 13 (4.3) | 24 (4.3) | 34 (4.3) |  | 71 (4.3) |  |
| RR (95% CI) - Lower | 1.0 (Ref) | 0.65 (0.37-1.14) | 0.86 (0.41-1.77) | 1.06 (0.29-3.91) | 0.636 | 0.68 (0.41-1.15) | 0.895 |
| RR (95% CI) - Higher  | 1.0 (Ref) | 0.74 (0.25-2.15) | 0.62 (0.21-1.81) | 0.51 (0.15-1.69) | 0.250 | 0.65 (0.23-1.82) |  |

Adjusted for energy intake, maternal age, race/ethnicity, educational attainment, cigarette smoking status, pre-pregnancy BMI, prenatal vitamin use, physical activity, family history of diabetes, alcohol and coffee consumption, sugar-sweetened soft drinks, red and processed meats, fatty fish and total fiber, dietary magnesium and Vitamin D intake.Each model adjusted for the above variables excluding the variable explored as effect modifier in each model