**Supplemental Table 1.** Gestational weight gain (GWG) relative to 2009 Institute of Medicine (IOM) recommendations† for all participants (*n* 861) and by prepregnancy body mass index (BMI) category

(Percentages and *P* value)

|  |  |  |
| --- | --- | --- |
| Prepregnancy BMI | GWG relative to recommendations |  |
| Below(*n* 143) | Within(*n* 305) | Above(*n* 413) | *P* value\* |
| All | 16.6 | 35.4 | 48.0 |  |
|  Underweight | 19.6 | 52.9 | 27.5 | <0.0001 |
|  Normal weight | 20.2 | 40.7 | 39.1 |  |
|  Overweight | 4.8 | 21.1 | 74.2 |  |
|  Obese | 11.4 | 14.8 | 73.9 |  |

\*The association between GWG relative to recommendations and prepregnancy BMI category was tested by performing a Chi-square test.

† The IOM-recommended GWG(5) ranges from 12.5 kg to 18.0 kg for underweight women (BMI<18.5), 11.5 kg to 16.0 kg for normal-weight women (18.5≤BMI<25.0), 7.0 kg to 11.5 kg for overweight women (25.0≤BMI<30.0), and 5.0 kg to 9.0 kg for obese women (BMI≥30.0).

**Supplemental Table 2.** Correlation between gestational weight gain and nutritional intakes (absolute values) during pregnancy† for all participants (*n* 861) and by prepregnancy body mass index (BMI) category‡

(Pearson’s correlation coefficient and *P* value)

| Nutritional intakes | All |  | Prepregnancy BMI category |
| --- | --- | --- | --- |
|  | Underweight(*n* 51) |  | Normal weight(*n* 575) |  | Overweight(*n* 147) |  | Obese(*n* 88) |
| *r* | *P*  |  | *r* | *P*  |  | *r* | *P*  |  | *r* | *P*  |  | *r* | *P*  |
| Energy (kcal) | 0.13 | 0.00\* |  | 0.16 | 0.26 |  | 0.10 | 0.02\* |  | 0.25 | 0.00\* |  | 0.22 | 0.04\* |
| Protein (g) | 0.10 | 0.00\* |  | 0.15 | 0.28 |  | 0.10 | 0.01\* |  | 0.22 | 0.01\* |  | 0.05 | 0.63 |
| Carbohydrate (g) | 0.10 | 0.00\* |  | 0.10 | 0.50 |  | 0.06 | 0.17 |  | 0.22 | 0.01\* |  | 0.17 | 0.12 |
| Total sugar (g) | 0.08 | 0.01\* |  | 0.02 | 0.91 |  | 0.06 | 0.18 |  | 0.17 | 0.04\* |  | 0.11 | 0.29 |
| Dietary Fibre (g) | 0.06 | 0.08 |  | -0.12 | 0.39 |  | 0.01 | 0.76 |  | 0.17 | 0.04\* |  | 0.13 | 0.25 |
| Total fat (g) | 0.11 | 0.00\* |  | 0.14 | 0.32 |  | 0.09 | 0.02\* |  | 0.18 | 0.03\* |  | 0.25 | 0.02\* |
| SFA (g) | 0.11 | 0.00\* |  | 0.17 | 0.24 |  | 0.09 | 0.02\* |  | 0.13 | 0.11 |  | 0.28 | 0.01\* |
| MUFA (g) | 0.09 | 0.01\* |  | 0.12 | 0.40 |  | 0.06 | 0.13 |  | 0.18 | 0.03\* |  | 0.21 | 0.05 |
| PUFA (g) | 0.10 | 0.01\* |  | 0.03 | 0.82 |  | 0.09 | 0.02\* |  | 0.15 | 0.07 |  | 0.16 | 0.14 |
| Cholesterol (mg) | 0.08 | 0.02\* |  | 0.09 | 0.53 |  | 0.08 | 0.07 |  | 0.16 | 0.05 |  | 0.12 | 0.28 |
| Vitamin A (RAE, ug) | 0.05 | 0.12 |  | 0.11 | 0.42 |  | 0.02 | 0.66 |  | 0.11 | 0.19 |  | 0.10 | 0.38 |
| Thiamine (mg) | 0.06 | 0.06 |  | 0.05 | 0.75 |  | 0.01 | 0.85 |  | 0.22 | 0.01\* |  | 0.21 | 0.04\* |
| Riboflavin (mg) | 0.09 | 0.01\* |  | 0.28 | 0.05 |  | 0.06 | 0.18 |  | 0.22 | 0.01\* |  | 0.17 | 0.12 |
| Niacin (NE) | 0.11  | 0.00\* |  | 0.08 | 0.57 |  | 0.10 | 0.02\* |  | 0.27 | 0.00\* |  | 0.11 | 0.31 |
| Vitamin B6 (mg) | 0.08 | 0.02\* |  | -0.14 | 0.34 |  | 0.05 | 0.20 |  | 0.18 | 0.03\* |  | 0.14 | 0.19 |
| Folate (DFE, ug) | 0.03 | 0.32 |  | 0.14 | 0.34 |  | -0.02 | 0.66 |  | 0.21 | 0.01\* |  | 0.13 | 0.23 |
| Vitamin B12 (ug) | 0.05 | 0.13 |  | 0.14 | 0.31 |  | 0.01 | 0.73 |  | 0.15 | 0.06 |  | -0.05 | 0.61 |
| Vitamin C (mg) | -0.02 | 0.52 |  | -0.23 | 0.11 |  | -0.06 | 0.16 |  | -0.03 | 0.74 |  | 0.20 | 0.06 |
| Vitamin D (ug) | 0.03 | 0.39 |  | 0.03 | 0.85 |  | 0.02 | 0.57 |  | 0.05 | 0.53 |  | 0.09 | 0.42 |
| Calcium (mg) | 0.09 | 0.01\* |  | 0.22 | 0.12 |  | 0.08 | 0.06 |  | 0.14 | 0.10 |  | 0.12 | 0.28 |
| Iron (mg) | 0.10 | 0.00\* |  | 0.08 | 0.56 |  | 0.04 | 0.33 |  | 0.32 | 0.00\* |  | 0.18 | 0.09 |
| Magnesium (mg) | 0.07  | 0.05 |  | -0.05 | 0.70 |  | 0.01 | 0.75 |  | 0.22 | 0.01\* |  | 0.11 | 0.30 |
| Phosphorus (mg) | 0.09 | 0.01\* |  | 0.15 | 0.30 |  | 0.08 | 0.07 |  | 0.21 | 0.01\* |  | 0.08 | 0.43 |
| Sodium (mg) | 0.12 | 0.00\* |  | 0.17 | 0.25 |  | 0.12 | 0.00\* |  | 0.26 | 0.00\* |  | 0.16 | 0.14 |
| Potassium (mg) | 0.07 | 0.05 |  | -0.04 | 0.77 |  | 0.03 | 0.48 |  | 0.16 | 0.05 |  | 0.15 | 0.17 |
| Zinc (mg) | 0.12 | 0.00\* |  | 0.33 | 0.02\* |  | 0.11 | 0.01\* |  | 0.31 | 0.00\* |  | 0.02 | 0.85 |

SFA, Saturated fatty acids; MUFA, Monounsaturated fatty acids; PUFA, Polyunsaturated fatty acids; RAE, Retinol Activity Equivalent; NE, Niacin Equivalent; DFE, Dietary Folate Equivalent.

\* *P*<0.05

† Acceptable reporters only (ratio of energy intake to basal metabolic rate between 1.00 and 2.40).

‡ Underweight: BMI<18.5; Normal weight: 18.5≤BMI<25.0; Overweight: 25.0≤BMI<30.0; Obese: BMI≥30.0.