**Supplementary Table 1.** ORs of birth outcomes associated with tertiles of total iron intake\* and dietary total iron intake during pregnancy in Shaanxi Province, Northwest China †

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total iron intake\* | | | | Dietary total iron intake | | | |
|  | Tertile 1 | Tertile 2 | Tertile 3 | *P*trend† | Tertile 1 | Tertile 2 | Tertile 3 | *P*trend† |
| Intake (mg/d) | <23.26 | 23.26-33.42 | >33.42 |  | <22.47 | 22.47-31.88 | >31.88 |  |
| Low birth weight | |  |  |  |  |  |  |  |
| Case/n§ | 95/2430 | 81/2438 | 67/2442 |  | 88/2427 | 83/2440 | 72/2443 |  |
| Model 1 | 1 | 0.90(0.65, 1.25) | 0.82(0.55, 1.23) | 0.274 | 1 | 1.01(0.73, 1.41) | 0.94(0.64, 1.39) | 0.734 |
| Model 2 | 1 | 0.88(0.63, 1.23) | 0.82(0.54, 1.23) | 0.290 | 1 | 1.00(0.72, 1.40) | 0.95(0.64, 1.41) | 0.781 |
| Model 3 | 1 | 0.89(0.64, 1.24) | 0.84(0.55, 1.26) | 0.289 | 1 | 1.00(0.72, 1.40) | 0.95(0.64, 1.42) | 0.799 |
| Model 4 | 1 | 0.89(0.64, 1.24) | 0.83(0.55, 1.24) | 0.327 | 1 | 1.01(0.72, 1.41) | 0.97(0.65, 1.45) | 0.873 |
| Preterm birth | |  |  |  |  |  |  |  |
| Case/n§ | 78/2452 | 76/2454 | 72/2447 |  | 81/2450 | 75/2449 | 70/2454 |  |
| Model 1 | 1 | 0.80(0.56, 1.14) | 0.75(0.49, 1.14) | 0.184 | 1 | 0.82(0.58, 1.17) | 0.71(0.47, 1.08) | 0.110 |
| Model 2 | 1 | 0.78(0.55, 1.12) | 0.73(0.48, 1.13) | 0.151 | 1 | 0.81(0.57, 1.14) | 0.70(0.46, 1.07) | 0.099 |
| Model 3 | 1 | 0.81(0.56, 1.15) | 0.79(0.51, 1.22) | 0.278 | 1 | 0.86(0.60, 1.23) | 0.77(0.50, 1.18) | 0.224 |
| Model 4 | 1 | 0.81(0.57, 1.16) | 0.81(0.52, 1.25) | 0.327 | 1 | 0.87(0.61, 1.24) | 0.79(0.52, 1.22) | 0.270 |
| Small for gestational age | | |  |  |  |  |  |  |
| Case/n§ | 318/2431 | 309/2427 | 307/2437 |  | 317/2422 | 309/2434 | 308/2439 |  |
| Model 1 | 1 | 0.91(0.75, 1.09) | 1.03(0.85, 1.23) | 0.924 | 1 | 1.09(0.91, 1.31) | 1.10(0.89, 1.37) | 0.371 |
| Model 2 | 1 | 0.89(0.74, 1.07) | 1.03(0.86, 1.24) | 0.908 | 1 | 1.11(0.91, 1.33) | 1.13(0.92, 1.40) | 0.260 |
| Model 3 | 1 | 0.89(0.74, 1.07) | 1.06(0.88, 1.27) | 0.739 | 1 | 1.10(0.92, 1.33) | 1.15(0.93, 1.43) | 0.198 |
| Model 4 | 1 | 0.88(0.73, 1.06) | 1.07(0.89, 1.29) | 0.659 | 1 | 1.11(0.92, 1.34 | 1.17(0.95, 1.46) | 0.143 |
| Intrauterine growth retardation | | |  |  |  |  |  |  |
| Case/n§ | 161/2427 | 139/2431 | 124/2437 |  | 157/2422 | 136/2434 | 131/2439 |  |
| Model 1 | 1 | 0.94(0.73, 1.22) | 0.94(0.69, 1.28) | 0.641 | 1 | 0.95(0.74, 1.23) | 1.02(0.76, 1.38) | 0.890 |
| Model 2 | 1 | 0.93(0.72, 1.21) | 0.90(0.66, 1.23) | 0.489 | 1 | 0.94(0.73, 1.23) | 0.98(0.73, 1.33) | 0.933 |
| Model 3 | 1 | 0.94(0.72, 1.21) | 0.92(0.67, 1.26) | 0.589 | 1 | 0.93(0.72, 1.21) | 0.99(0.73, 1.34) | 0.994 |
| Model 4 | 1 | 0.94(0.73, 1.22) | 0.94(0.68, 1.28) | 0.657 | 1 | 0.94(0.72, 1.22) | 1.01(0.75, 1.37) | 0.918 |
| Birth defects | |  |  |  |  |  |  |  |
| Case/n§ | 52/2450 | 47/2452 | 44/2454 |  | 53/2450 | 46/2452 | 44/2454 |  |
| Model 1 | 1 | 0.83(0.53, 1.30) | 0.90(0.58, 1.40) | 0.377 | 1 | 0.82(0.53, 1.28) | 0.79(0.51, 1.21) | 0.247 |
| Model 2 | 1 | 0.86(0.54, 1.35) | 0.91(0.59, 1.42) | 0.466 | 1 | 0.84(0.54, 1.30) | 0.80(0.52, 1.25) | 0.302 |
| Model 3 | 1 | 0.91(0.58, 1.42) | 0.92(0.58, 1.46) | 0.664 | 1 | 0.82(0.52, 1.30) | 0.87(0.55, 1.35) | 0.463 |
| Model 4 | 1 | 0.91(0.58, 1.43) | 0.92(0.58, 1.46) | 0.659 | 1 | 0.83(0.52, 1.30) | 0.86(0.55, 1.35) | 0.457 |

\*Total iron intake indicated the sum of dietary iron and supplemental iron intakes.

†Multilevel logistic regression models were used to estimate ORs and 95%CIs. Model 1 was adjusted for energy. Model 2 was adjusted for energy and socio-demographic characteristics, including geographic area, residence, childbearing age, education, occupation, household wealth index and parity. Model 3 was adjusted for all variables in Model 2 plus health-related characteristics, including passive smoking, alcohol drinking, antenatal check visit frequency, folate supplements use, anemia and medication use. Model 4 was adjusted for all variables in Model 3 plus principal component score based on the nutrient intakes. Models were additionally adjusted for iron supplements use to examine the effect of dietary total iron.

‡*P* for trend across tertiles was calculated using the median intake of each tertile as a continuous variable.

§Case/n indicated the number of participants who had the corresponding adverse birth outcomes in the corresponding groups/the total number of participants in the corresponding groups.