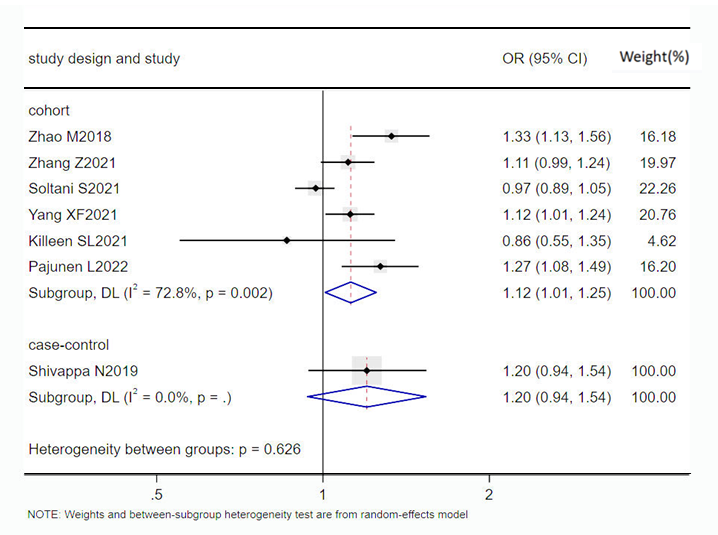
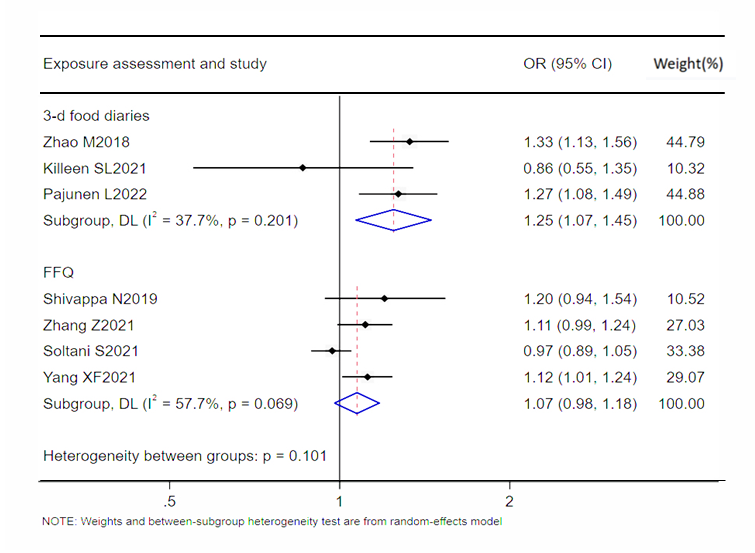
**Supplementary materials**

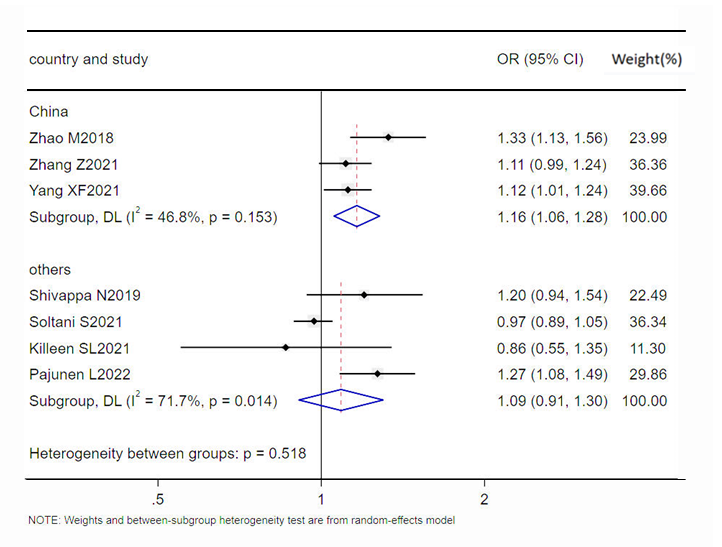
**Supplementary table 1.** Inflammatory assessment tool and its components.

|  |  |  |  |
| --- | --- | --- | --- |
| **First Author** | **Inflammatory assessment tool** | **Number** | **Components** |
| Sen S2016 | DII | 28 | energy, carbohydrate, protein, fat, alcohol, fiber, cholesterol, SFAs, MUFAs, PUFAs, n–3 and n–6 FAs, trans-fat, niacin, thiamin, riboflavin, vitamin B-12, vitamin B-6, iron, magnesium, zinc, selenium, vitamin A, vitamin C, vitamin D, vitamin E, folic acid, and β-carotene. |
| Zhao M2018 | DII | 20 | energy, carbohydrate, protein, fat, cholesterol, saturated fatty acids, monounsaturated fatty acids, polyunsaturated fatty acids, fiber, folic acid, vitamin A, vitamin C, |
| Shivappa N2019 | DII | 32 | energy, carbohydrate, protein, total fat, fiber, cholesterol, saturated fat, mono-unsaturated fat, poly unsaturated fat, omega-3, omega-6, trans fat, niacin, thiamin, riboflavin, vitamin B12, vitamin B6, iron, magnesium, selenium, zinc, vitamin A, vitamin C, vitamin D, vitamin E, folic acid, β-carotene, garlic, turmeric, onion, caffeine. |
| Zhang Z2021 | DII | 26 | carbohydrate, protein, fat, cholesterol, saturated fatty acids, monounsaturated fat, polyunsaturated fat, n-3 polyunsaturated fatty acid (PUFA), n-6 PUFA, fiber, folic acid, vitamin A, vitamin C, vitamin D, vitamin E, thiamin, riboflavin, niacin, vitamin B6, vitamin B12, β-carotene, Fe, Zn, Se, Mg, and isoflavone. |
| Soltani S2021 | DIP | 29 | energy, carbohydrate, fat, protein, cholesterol, saturated fat, vitamin B12, iron, mono-unsaturated fatty acids (MUFAs), poly unsaturated fatty acids (PUFAs), fiber, vitamin B6, folic acid, niacin, riboflavin, thiamin, vitamin A, vitamin C, vitamin D, vitamin E, β-carotene, caffeine, pepper, onion, garlic, tea, zinc, selenium, and magnesium. |
| Yang XF2021 | DII | 27 | energy, carbohydrate, fat, protein, cholesterol, saturated fatty acids, monounsaturated fatty acids, polyunsaturated fatty acids, n-3 PUFA, n-6 PUFA, fiber, folic acid, vitamin A, β-carotene, vitamin C, vitamin E, vitamin B1, vitamin B2, vitamin B3, vitamin B6, vitamin B12, vitamin D, iron, zinc, selenium, magnesium, soy isoflavones. |
| Killeen SL2021 | E-DII | 27 | carbohydrate, protein, fat, alcohol, fibre, cholesterol, saturated fatty acids, mono-unsaturated fatty acids, poly-unsaturated fatty acids, omega-3 fatty acids, omega–6 fatty acids, trans-fat, niacin, thiamine, riboflavin, vitamin B-12, vitamin B-6, iron, magnesium, zinc, selenium, vitamin A, vitamin C, vitamin D, vitamin E, folic acid, and β-carotene. |
| Pajunen L2022 | E-DII | 27 | carbohydrate, protein, total fat, alcohol, fiber, cholesterol, SFA, monounsaturated fatty acids, polyunsaturated fatty acids, omega-3 fatty acids, omega-6 fatty acids, trans fatty acids, niacin, thiamine, riboflavin, vitamin B12, vitamin B6, vitamin A, vitamin C, vitamin E, vitamin D, iron, magnesium, zinc, selenium, folic acid, and β-carotene. |
| Liu YH2022 | DII | 35 | energy, carbohydrate, protein, total fat, cholesterol, fatty acids, saturated fatty acids (SFAs), monounsaturated fatty acids (MUFAs), polyunsaturated fatty acids (PUFAs), omega-3 fats, omega-6 fats, soluble fiber, carotene, β-carotene, total carotenoids, thiamin, riboflavin, niacin, vitamin C, vitamin A, vitamin E, vitamin D, vitamin B6, vitamin B12, folic acid, magnesium, iron, zinc, selenium, total anthocyanidins, total flavonoids, total flavan-3-ol, total flavanones, total flavones and total flavonols. |

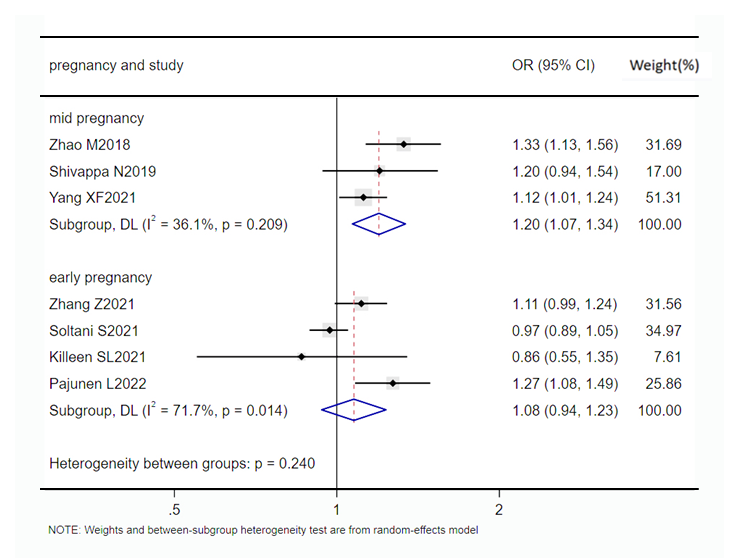
****

**Supplementary figure S1** Forest plot of subgroup analysis of study design

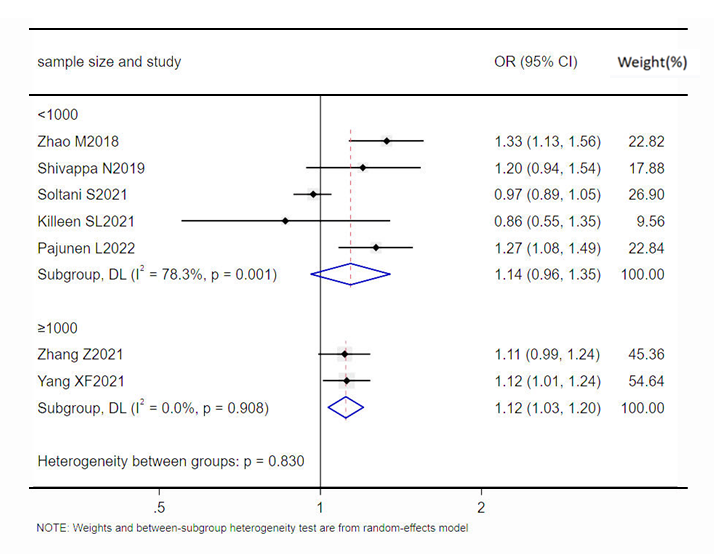
**Supplementary figure S2** Forest plot of subgroup analysis of exposure assessment



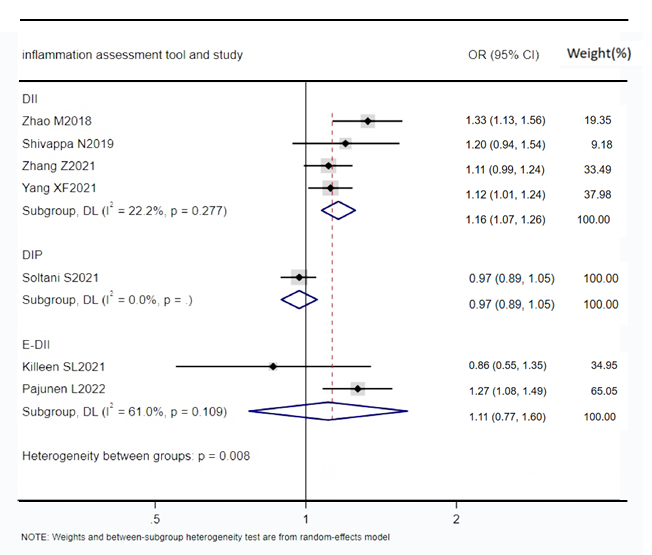
**Supplementary figure S3** Forest plot of subgroup analysis of country



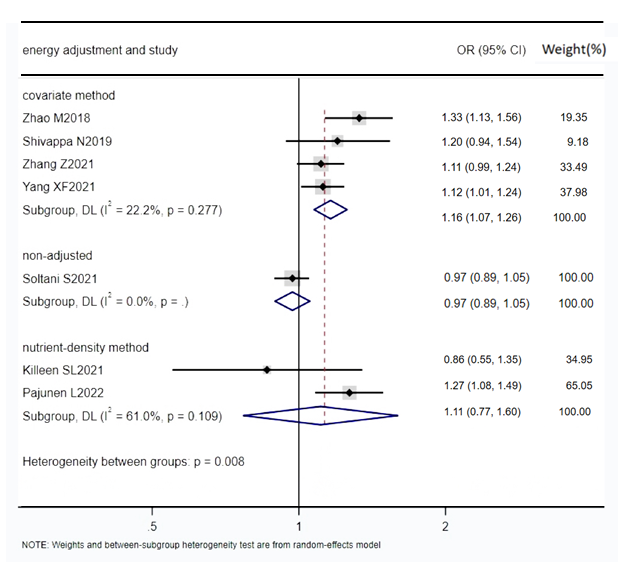
**Supplementary figure S4** Forest plot of subgroup analysis of pregnancy



**Supplementary figure S5** Forest plot of subgroup analysis of sample size



**Supplementary figure S6** Forest plot of subgroup analysis of inflammation assessment tool



**Supplementary figure S7** Forest plot of subgroup analysis of energy adjustment