

## Supplementary File S1:

**Equation (S1). The calculation of pre-pregnancy body mass index**

$$\text{Pre-pregnancy BMI} = \frac{\text{Weight(kg)}}{\text{Height(m)}^2}$$

**Equation (S2). The calculation of daily energy requirements**

**(1) The calculation of standard weight**

$$\text{Standard weight (kg)} = \text{Height(cm)} - 105$$

**(2) The calculation of total energy requirement**

$$\text{Total energy (kcal/per day)} = \text{Standard weight(kg)} \times \text{Energy amount (per kg/per day)} + 300\text{kcal}$$

(second trimester)/450kcal (third trimester)

**Equation (S3). The calculation of number of food exchange serving**

$$\text{Number of food exchange serving} = \frac{\text{Total Energy(kcal)}}{90}$$

## Supplementary File S2

**Table S1. The classification of body type in women with GDM according to pre-pregnancy BMI.**

Pre-pregnancy BMI	Body type
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BMI<18.5 (kg/m <sup>2</sup> )	Thin
18.5≤BMI≤24.9 (kg/m <sup>2</sup> )	Normal
25.0≤BMI<30.0 (kg/m <sup>2</sup> )	Overweight
BMI≥30.0 (kg/m <sup>2</sup> )	Obesity

**Table S2. Daily energy requirement based on labor intensity of Chinese adults.**

Labor Intensity	Examples of Job Categories	Daily Energy Requirements (Standard Weight per kg)		
		Thin	Normal	Overweight or Obesity
Rest on bed	— —	20-25	15-20	15
Light physical labor	Office staff, teachers, and housewives.	35	30	20-25
Moderate physical	Students, drivers, doctors, and farmers	40	35	30

labor	(general farm work).			
Heavy physical				
labor	Builders, porters, and athletes.	45	40	35

### Supplementary File S3:

1. "How many days a week do you eat according to the principle of "breakfast, lunch and dinner, and 2-4 extra meals?"
2. "How many days a week do you match the staple food according to the principle that the ratio of coarse grain to fine grain is 1: 2 or 1: 4?"
3. "How many days a week do you subtract the corresponding staple food when eating starchy foods (for example, 100 grams of potatoes can be exchanged with 25 grams of rice, millet and sorghum rice)?"
4. "How many days a week do you follow the food exchange strategy as recommended by the medical staff?"
5. "How many days a week do you refer to the GL value of food when choosing foods?"