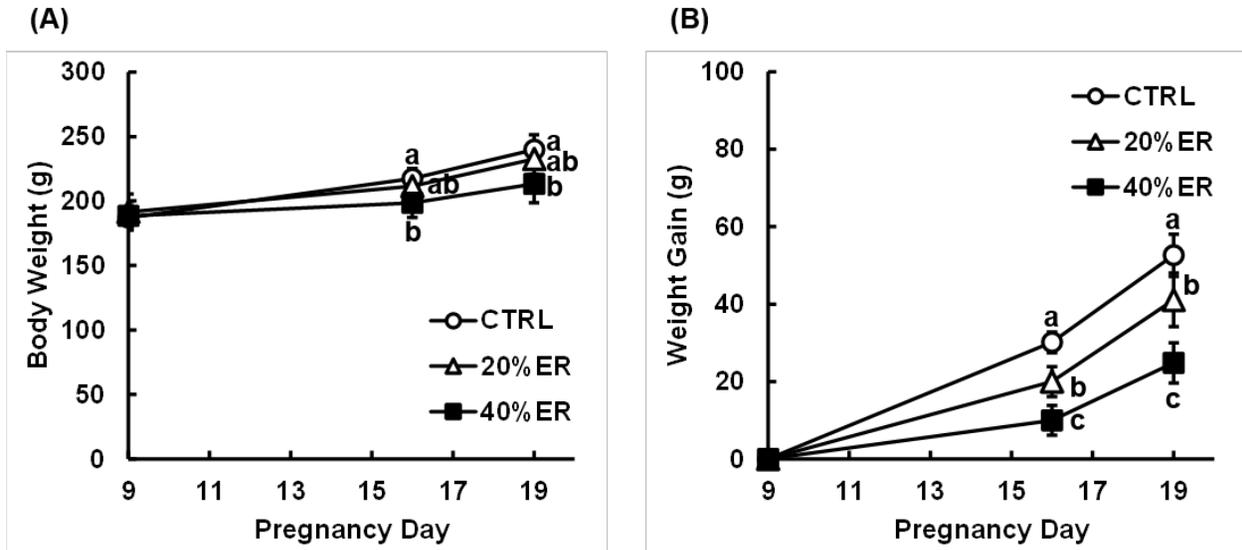


**Figure S1 Body weights and weight gain of pregnant rats.**



Body weights (a) and weight gain (b) of pregnant rats were measured on the pregnancy day 9 (PD9), 16, and 19. Weight gains during the experimental period were also calculated. Data are expressed as means  $\pm$  SDs ( $n = 6$ ), which were analyzed by one-way ANOVA followed by a Tukey-Kramer HSD test; at each time point, values with different letters are significantly different ( $p < 0.05$ ). CTRL, control; 20%ER, 20% energy restriction; 40%ER, 40% energy restriction.

**Table S1 Simple linear regression analyses of maternal background/gestational outcome vs infant birth weight in pregnant women.**

Independent Variable	R	<i>p</i>
Maternal background		
Age	-0.028	0.677
Height	0.119	<0.073
Pre-pregnancy body weight	0.201	<0.01
Pre-pregnancy BMI	0.180	<0.01
Gestational Outcome		
Gestation Period	0.457	<0.0001
Body weight at delivery	0.247	<0.001
Weight gain	0.121	0.068

BMI, body mass index.

**Table S2 Simple linear regression analyses between serum ALB redox state in the third trimester, pre-pregnancy body weight, pre-pregnancy BMI, gestation period, and body weight and delivery in pregnant women.**

	Serum ALB redox state* <sup>1</sup>	Pre-pregnancy body weight	Pre-pregnancy BMI	Gestation Period	Body weight at delivery
Serum ALB redox state* <sup>1</sup>	-	R = -0.084 <i>p</i> = 0.207	R = -0.037 <i>p</i> = 0.573	R = 0.197 <i>p</i> < 0.01	R = -0.032 <i>p</i> = 0.634
Pre-pregnancy body weight	R = -0.084 <i>p</i> = 0.207	-	R = 0.929 <i>p</i> < 0.0001	R = 0.058 <i>p</i> = 0.384	R = 0.915 <i>p</i> < 0.0001
Pre-pregnancy BMI	R = -0.037 <i>p</i> = 0.573	R = 0.929 <i>p</i> < 0.0001	-	R = 0.066 <i>p</i> = 0.321	R = 0.827 <i>p</i> < 0.0001
Gestation Period	R = 0.197 <i>p</i> < 0.01	R = 0.058 <i>p</i> = 0.384	R = 0.066 <i>p</i> = 0.321	-	R = 0.099 <i>p</i> = 0.136
Body weight at delivery	R = -0.032 <i>p</i> = 0.634	R = 0.915 <i>p</i> < 0.0001	R = 0.827 <i>p</i> < 0.0001	R = 0.099 <i>p</i> = 0.136	-

\*<sup>1</sup> Analyzed in the third trimester.

ALB, albumin; BMI, body mass index.

**Table S3 Birth outcomes of pregnant rats.**

Outcome	CTRL	20% ER	40% ER
Litter weight (g)	40.2 ± 15.6	45.3 ± 8.6	40.5 ± 7.7
Litter size	8.3 ± 3.3	10.0 ± 2.2	9.7 ± 2.3
Birth weight in the litter	4.9 ± 0.2 <sup>a</sup>	4.6 ± 0.2 <sup>ab</sup>	4.2 ± 0.3 <sup>b</sup>

Data are expressed as means ± SD (n = 6), which were analyzed by one-way ANOVA followed by a Tukey-Kramer HSD test; values with different letters are significantly different ( $p < 0.05$ ).

CTRL, control; 20%ER, 20% energy restriction; 40%ER, 40% energy restriction.