Supplementary Information

Table S1. The maternal folic acid intakes before and during pregnancy among groups (μg/day).

	Ctrl	RFolS	HFolS
Number	20	20	20
Week			
−2	5.78 ± 0.42 [#]	14.79 ± 1.26 *	117.74 ± 10.57 *,[#]
−1	5.92 ± 0.54 [#]	15.01 ± 1.27 *	121.43 ± 9.05 *,[#]
1	5.96 ± 0.46 [#]	15.19 ± 1.41 *	119.53 ± 11.22 *,[#]
2	6.48 ± 0.46 [#]	16.13 ± 1.19 *	129.15 ± 11.98 *,[#]
3	10.91 ± 1.03 [#]	26.68 ± 2.05 *	208.77 ± 16.74 *,[#]

Daily folic acid intake (μg/day) = Folic acid contents in diets (μg/g) × daily food intake (g/day). Data are compared by analysis of variance with the *post hoc* Bonferroni method. * $p < 0.05$, compared with Ctrl; [#] $p < 0.05$, compared with RFolS. Negative sign represents the weeks before pregnancy. Abbreviations: Ctrl, Control; HFolS, High folic acid supplement; RFolS, recommended folic acid supplement.
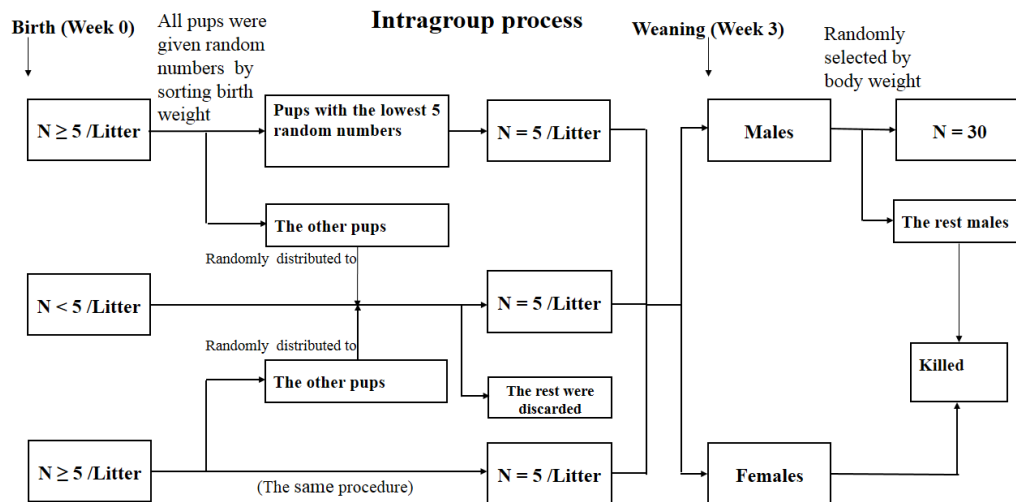
Table S2. Formulated control and obesogenic diet.

Ingredient	Control AIN-93G diet (g)	High fat diet (g)
Cornstarch	397.5	287.5
Casein	200.0	200.0
Dextrinized cornstarch	132.0	132.0
Sucrose	100.0	100.0
Soybean oil	70.0	30.0
Lard [a]	0.0	150.0
Fiber	50.0	50.0
Mineral mix (AIN-93G-MX)	35.0	35.0
Vitamin mix (AIN-93-VX)	10.0	10.0
L-Cystine	3.0	3.0
Choline bitartrate	2.5	0.0
Cholate	0.0	2.5

[a] The actual fatty acid composition of lard is 1.4% 14:0, 24.8% 16:0, 2.2% 16:1, 13.2% 18:0, 44.3% 18:1, 13.8% 18:2 and 0.1% 18:3.

Table S3. Primer pairs used in present study.

Gene	Primer
Adiponectin	Forward: GTCAGTGGATCTGACGACACCAA
	Reverse: ATGCCTGCCATCCAACCTG
IL-6	Forward: TCCAGTTGCCTTCTTGGGAC
	Reverse: GTGTAATTAAGCCTCCGACTTG
Leptin	Forward: GATGACACCAAAACCCTCATC
	Reverse: GCCACCACCTCTGTGGAGTAG
TNF-α	Forward: CAGGAGGGAGAACAGAAACTCCA
	Reverse: CCTGGTTGGCTGCTTGCTT
Actin	Forward: CATCCGTAAAGACCTCTATGCCAAC
	Reverse: ATGGAGCCACCGATCCACA

Figure S1. The detailed procedures of random selection at delivery and weaning.