

## Supplemental Information

**Table S1.** Primers used in the real-time(RT)-PCR analysis of *ptger1*-related gene expression.

<b>Gene</b>	<b>Forward primer</b>	<b>Reverse primer</b>
<i>enaca</i>	5'-AAGTGGACCGGAAGGACTGG-3'	5'-CCTGGACAGAATGTTGATGTAATGG-3'
<i>enac<math>\beta</math></i>	5'-TTGCCTGCTGGGGAGA-3'	5'-GGTCATCTTATACTGGGTGTCGTTG-3'
<i>enac<math>\gamma</math></i>	5'-GAAATGGTTGCTGAATGTTCTCAC-3'	5'-TACTGTTGGCTGGGCTCTCC-3'
<i>ptger1</i>	5'-AGTAGCTGGAGTGGGCAGCA-3'	5'-GCTCATATCAGTGGCCAAGAGG-3'
<i>ptges3</i>	5'-AGATTACCAGAAGTAGACGGAGCA-3'	5'-CCAGGCGATGATACCACTCTTTAC-3'

**Table S2.** Liquid consumption, urine volume, and organ weights exhibited by offspring provided with drinking water (W), and either a high (CN) or low (LP)-protein diet.

<b>Parameter</b>	<b>CN-W</b>	<b>LP-W</b>
Drinking water consumption (ml/day)	25.3 ± 1.04	24.5 ± 1.49
Urine volume (ml/day)	10.4 ± 0.65	10.8 ± 0.30
Body weight (g)	301 ± 3.30	288 ± 5.82
Kidney weight (g)	2.48 ± 0.04	2.45 ± 0.05
Brain weight (g)	1.90 ± 0.02	1.86 ± 0.02
Heart weight (g)	1.15 ± 0.01	1.15 ± 0.02

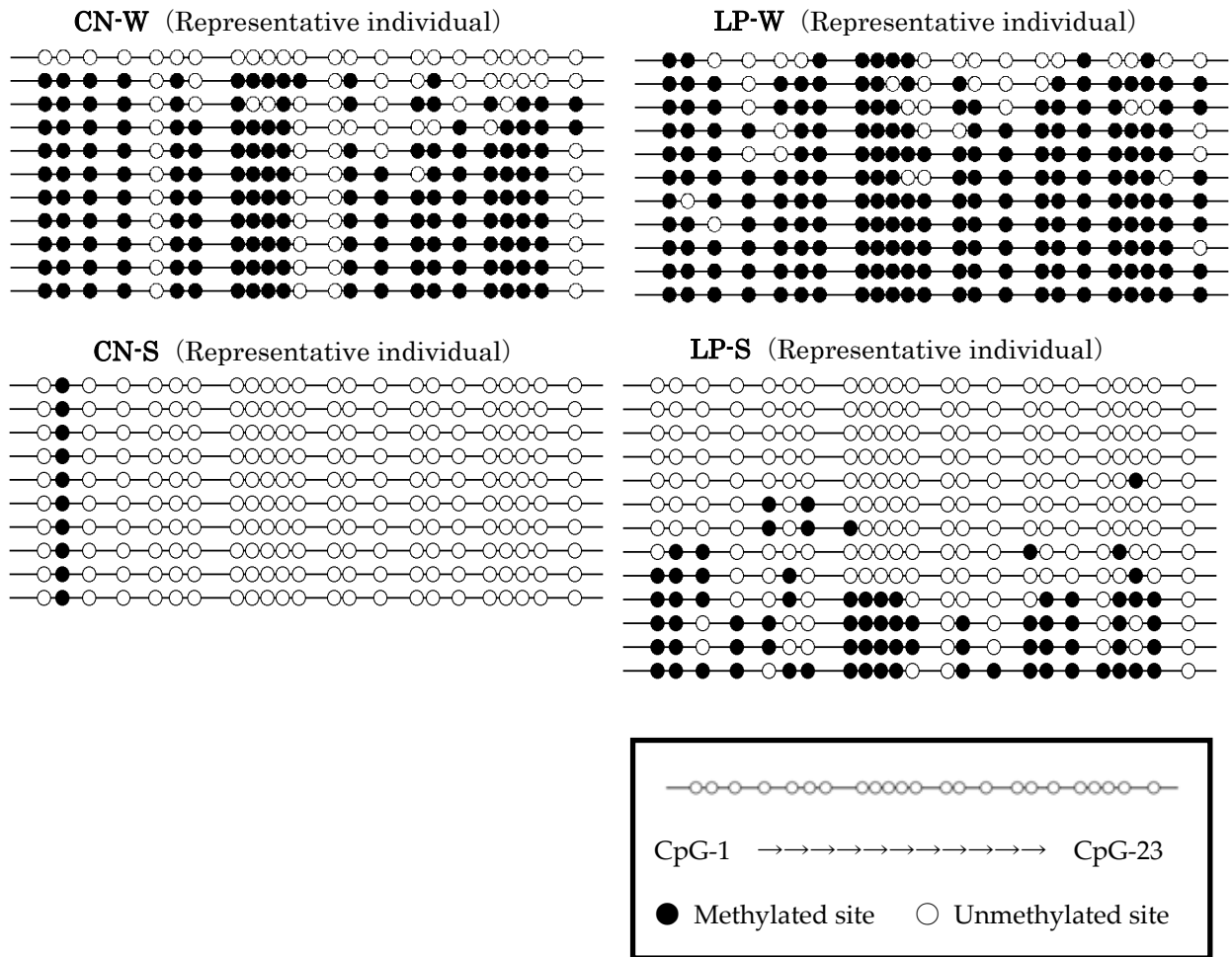
Values are expressed as the mean ± standard error (n=7). CN, 20%-Casein diet; LP, 9%-Casein diet.

**Table S3.** Liquid consumption, urine volume, and organ weights in exhibited by offspring provided with a 1% saline drinking solution (S), and either a high (CN) or low (LP)-protein diet.

<b>Parameter</b>	<b>CN-S</b>	<b>LP-S</b>
Saline drinking solution consumption (ml/day)	41.4 ± 1.5	48.9 ± 3.0
Urine volume (ml/day)	20.8 ± 3.3	25.3 ± 4.8
Body weight (g)	255 ± 3.30	264 ± 7.93
Kidney weight (g)	2.00 ± 0.02	2.13 ± 0.15
Brain weight (g)	1.87 ± 0.01	1.90 ± 0.03
Heart weight (g)	1.03 ± 0.02	1.11 ± 0.07*

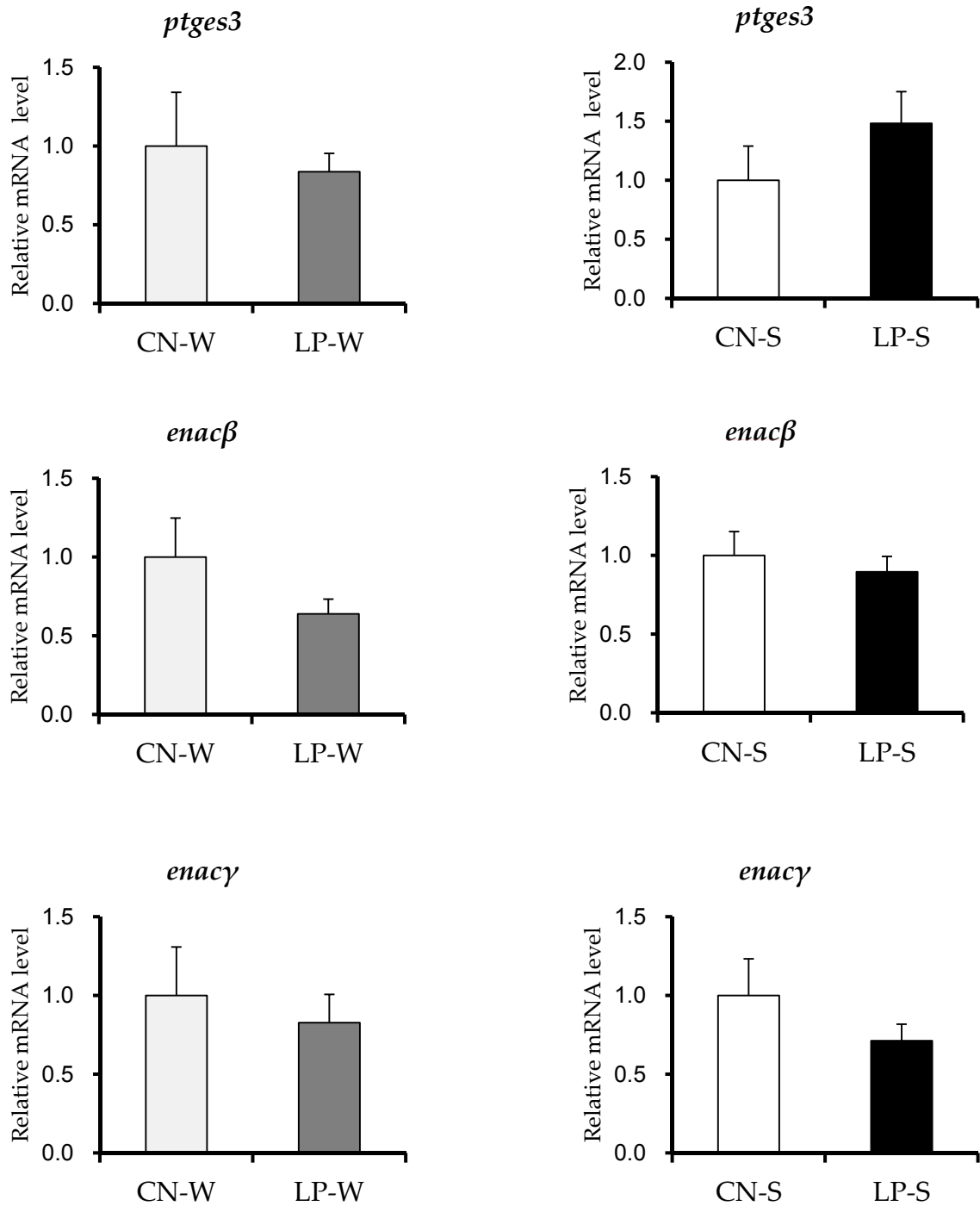
Values are expressed as means ± standard error (n=7-8). \*p < 0.05 vs. the CN-S group according to a Student's t-test. ).

CN, 20%-Casein diet; LP, 9%-Casein diet.



**Figure S1.** *ptger1* DNA methylation status according to the conducted bisulfite-sequencing analysis.

CN, 20%-Casein diet; LP, 9%-Casein diet; S, 1% saline drinking solution; W, drinking water.



**Figure S2.** Relative renal mRNA expression of *ptger1*-related genes. Values are expressed as the mean  $\pm$  standard error (n=7–8). CN, 20%-Casein diet; LP, 9%-Casein diet; S, 1% saline drinking solution; W, drinking water.