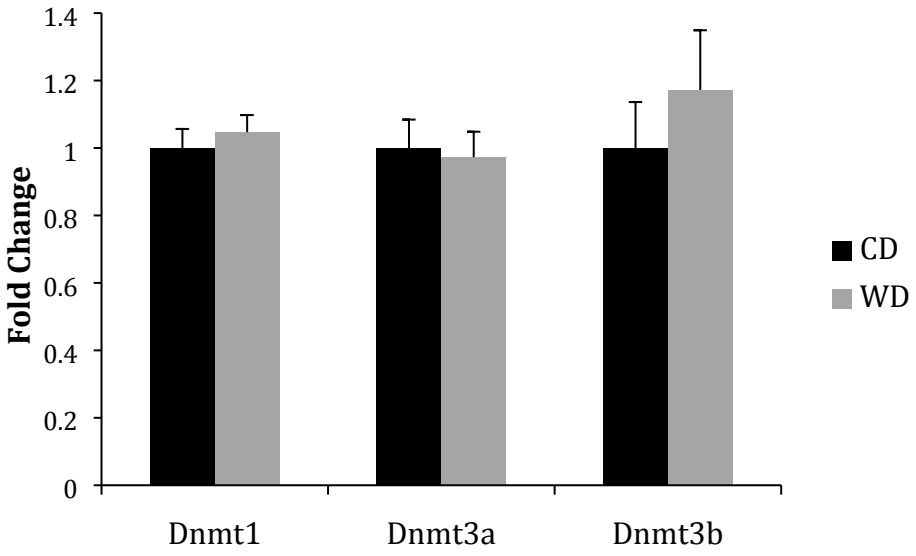
Electronic Supplementary Material (ESI) for Food & Function.



Supplemental Figure 1: Gene expression of Dnmt enzymes as determined by qPCR. Consumption of a WD did not significantly impact the gene expression of *Dnmt1*, *Dnmt3a* or *Dnmt3b* ($p = 0.587$, $p = 0.780$ and $p = 0.449$, respectively). Expression of each gene was normalized to that of *Gapdh*, and fold change was calculated as the ratio of WD to CD. n = 6 per treatment group, and results are expressed as mean ± SEM. $p < 0.05$ was considered significant.

Supplemental table 1 : Composiiton of the diets

Wetern type diet

Formula	g/Kg
Casein	195
DL-Methionine	3
Sucrose	341.46
Corn Starch	150
Andydrous Milkfat	210
Cholesterol	1.5
Cellulose	50
Mineral Mix, AIN-76 (170915)	35
Calcium Carbonate	4
Vitamin Mix, Teklad (40060)	10
Ethoxyquin	0.04

Control Diet

Formula	g/Kg
Casein	195
DL-Methionine	3
Sucrose	120
Corn Starch	432.99
Maltodextrin	100
Andydrous Milkfat	37.2

Soybean Oil	12.8
Cellulose	50
Mineral Mix, AIN-76 (170915)	35
Calcium Carbonate	4
Vitamin Mix, Teklad (40060)	10
Ethoxyquin	0.04

Supplemental Table 2: Nucleotide sequences of primers used to quantify gene expression of various genes using qRT-PCR.

Gene	Forward Primer (5' to 3')	Reverse Primer (5' to 3')
Dnmt1	CCAGCTGCCAAACGGAGA	CCTCGGGAGTCTCTGGAGCTA
Dnmt3a	CACTGGAGTAGGCGCTGAGAC	CAGCAAAGGGCCTTCCATAG
Dnmt3b	CCGTTCGACTTGGTGATTGG	GGGCAGGATTGACGTTAGAGAG
Gapdh	GGATAGGGCCTCTCTTGCTCA	GCAACAGGGTGGTGGACCT