

Table S1. Description of composition of experimental diets (g/100g diet).

Nutrient	Source	AIN-93	AIN-93 adjusted 25% Ramon flour	HFD	HFD adjusted 25% Ramon flour
Carbohydrate		62.9	62.9	41.6	41.6
	Cornstarch	39.7	28.8	26.3	41.5
	Maltodextrin	13.3	9.39	8.73	14.8
	Sucrose	10	7.11	6.61	3.72
	Ramon flour	-	18.2	-	18.2
Protein		20	20	24	24
	Casein	20	17.1	24	21.1
	Ramon flour	-	2.9	-	2.9
Lipid		7	24	7	24
	Soy oil	7	6.7	7	6.7
	Lard	-	-	17	17
	Ramon flour	-	0.3	-	0.3
Fiber		5	5.3	5	5.3
	Cellulose	5	-	5	-
	Ramon flour	-	5.3	-	5.3
Mineral	Mineral mix	3.5	3.5	3.5	3.5
Vitamin	Vitamin mix	1	1	1	1
	L-Cystine	0.3	0.3	0.3	0.3
	Choline bitartrate	0.25	0.25	0.25	0.25
	TBHQ	0.0014	0.0014	0.0014	0.0014

Table S2. Sequencies used for mRNA expression by SYBER GREEN assays.

Gen	Forward	Reverse
<i>Acox1</i>	GCCATTCGATACAGTGCTGTGAG	CCGAGAAAGTGGAAGGCATAGG
<i>Cpt1</i>	GCACTGCAGCTCGCACATTACAA	CTCAGACAGTACCTCCTTCAGGAAA
<i>Fas</i>	ATGCACACTCTGCGATGAAG	CAGTGTTACAGCCAGGAGA
<i>Sod2</i>	TAACGCGCAGATCATGCAGCTG	AGGCTGAAGAGCGACCTGAGTT
<i>Cyclophilin</i>	CAGGGGAGATGGCACAGGAG	CGGCTGTCTGTCTTGGTGCTCTCC