

Supplementary material

Supplementary Table 1. Composition of diets

Ingredients (g·kg⁻¹ diet)	30NR	0NR
Casein	100.0	100.0
Wheat starch	233.1	233.1
Gelatin (hydrolysed)	100.0	100.0
Maltodextrin	100.0	100.0
Sugar	100.0	100.0
Dextrose	50.0	50.0
Arbocel B800	50.0	50.0
Linseed oil	4.0	4.0
Palm oil	206.0	206.0
Mineral mixture AIN-93*	35.0	35.0
Vitamin mixture AIN-93*	10.0	10.0
L-cystine	3.25	3.25
L-phenylalanine	4.32	4.32
Choline chloride 50%	1.55	1.55
Nicotinamide riboside (mg·kg ⁻¹ diet)	30.0	0.0
Calculated amount of L-tryptophan (%)	1.15	1.15
Calculated energy (kcal·kg ⁻¹)	4653	4653
Carbohydrate (% of total energy)	41	41
Fat (% of total energy)	40	40
Protein (% of total energy)	19	19

* Contains no vitamin B₃ but sufficient minerals and the other vitamins, including iron, vitamin B1, B2 and B6 at the recommended AIN93 levels (Reeves et al., 1993)

Supplementary Table 2. RT-qPCR primer sequences.

Gene name	Forward primer	Reverse primer	Tissue
<i>Mttp</i>	GTGGAGGAATCCTGATGGTGA	TGATCTTAGGTGTACTTTTGCCC	Liver
<i>Dgat2</i>	CTATTTGGCTACGTTGGCTGGTAAC	TTGGAGAGCAAGTAGTCTATGGTGTC	Liver
<i>ApoB</i>	TACTTCCACCCACAGTCCCC	AGGGAGCCTAGCAATCTGGA	Liver
<i>Anp32a</i>	CCGTGGGTTTCGGGGTTTATT	CTCTTTCACATCAGAGGGCGT	WAT
<i>Map2k1</i>	TGGGCACGAGATCCTACATG	TGGCATCAGGAGGAGGAATG	WAT
<i>Mapk1</i>	ATGACCCAAGTGATGAGCCC	AGCCCTTGTCTGACCAATTT	WAT
<i>Mthfs</i>	GTCTCTCCTCCTCACGCAGA	GGTCAAGTCCACCAGTGGATAA	WAT
<i>Mthfsl</i>	CGGTGCTTGCCAGGAATG	GCAATCACCTTCTGCGTGAG	WAT
<i>Qdpr</i>	CATTGCTGTGCTCCCCGTTA	TCCTGAGTTTGGCCGTTTGT	WAT
<i>Slc2a4 (glut4)</i>	CCATTCCCTGGTTCATTGTG	GTTTTGCCCTCAGTCATTC	WAT
<i>Tnk2</i>	ACTTTGGGCTGATGCGAGCACT	AAGGTGCGTGTCTTCAGGCTCT	WAT
<u><i>Canx</i></u>	GCAGCGACCTATGATTGACAACC	GCTCCAAACCAATAGCACTGAAAGG	Liver
<u><i>Hprt 1</i></u>	TGACACTGGTAAAACAATGCAAACCTG	GAGGTCCTTTTCACCAGCAAGCT	Liver
<u><i>Rps 15</i></u>	CGGAGATGGTGGGTAGCATGG	ACGGGTTTGTAGGTGATGGAGAAC	Liver, WAT
<u><i>B2m</i></u>	CCCCACTGAGACTGATACATACGC	AGAAACTGGATTTGTAATTAAGCAGGTTC	WAT

Annealing temperature was 60°C. Underlined genes are used as reference genes.