

## **Supporting information**

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**Supplementary Table S1. Composition of AIN93M and OYC-NASH2.**

	Name of nutrient	Unit	AIN-93M	OYC-NASH2
	Water	g/100g(diet)	9.0	9.0
	Crude protein	g/100g(diet)	12.7	17.1
	Crude fat	g/100g(diet)	4.3	27.4
<b>General ingredients</b>	Rough grey	g/100g(diet)	3.0	2.9
	Crude fiber	g/100g(diet)	5.0	4.7
	NFE	g/100g(diet)	65.9	39.0
	Calories	kcal/100g(diet)	353.5	470.5
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	Protein calorie ratio	%/ calorie	14.4	14.5
<b>Calorie ratio</b>	Fat calorie ratio	%/ calorie	11.1	52.3
	NFE calorie ratio	%/ calorie	74.5	33.2
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	Saturated fatty acid	%/total fatty acids	15.9	41.7
<b>Main fatty acid composition</b>	Monounsaturated fatty acid	%/total fatty acids	23.8	46.4
	Polyunsaturated fatty acids	%/total fatty acids	60.1	10.1
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<b>Others</b>	Amount of methionine added	g	0.34	0.11
<b>important ingredient</b>				
	Amount of choline added	g	0.18	-

NFE: Nitrogen-Free Extract

**Supplementary Table S2. Primer pairs used for qPCR analysis.**

<b>Gene</b>	<b>Accession #</b>	<b>Primer sequence (5'-3')</b>	
18S rRNA	NR_003278	F	5'-CACGGACAGGATTGACAGATTG-3'
		R	5'-CAGACAAATCGCTCCACCAA-3'
Acta2	NM_007392	F	5'-ACTGGGACGACATGGAAAAG-3'
		R	5'-GTTCACTGGTGCCTCTGTCA-3'
Afp	NM_007423	F	5'-AGTTTCCAGAACCTGCCGAG-3'
		R	5'-ACCTTGTCGTACTGAGCAGC-3'
Casp1	NM_009807	F	5'-TACCTGGCAGGAATTCTGGA-3'
		R	5'-AGTCCTGGAAATGTGCCATC-3'
Ccl2	NM_011333	F	5'-AGGTCCCTGTCATGCTTCTG-3'
		R	5'-GGGATCATCTGCTGGTCAA-3'
Ccnd1	NM_007631	F	5'-CCAGAGGCGGATGAGAACAA-3'
		R	5'-ATGGAGGGTGGGTTGGAAA-3'
Cdk4	NM_009870	F	5'-CCTGAGGACATACTGGACAAAG-3'
		R	5'-CCGCTTAGAAACTGACGCATT-3'
Cd68	NM_001291058	F	5'-GAGGTTGTGACGGTACCCAT-3'
		R	5'-ACATTGTATTCCACCGCCAT-3'
Clec1b	NM_019985.3	F	5'-CTGGGGATCATGTCGGTCAC-3'
		R	5'-TGGTATCTCCACTTCGTGGC-3'
Clec4f	NM_016751.3	F	5'-TCACTACTGTGGCTTGCAG-3'
		R	5'-GACTTAGGCCAGTCCTTG-3'
Col1a1	NM_007742	F	5'-ACATGTTCAGCTTGTGGACC-3'
		R	5'-TAGGCCATTGTGTATGCAGC-3'
Cxcr3	NM_009910.3	F	5'-AGCCATGTACCTTGAGGTTAG-3'
		R	5'-GTCAGAGAAGTCGCTCTCGT-3'
Cxcr6	NM_030712.4	F	5'-ACTGGCTTCTCTTGATGCC-3'
		R	5'-CACTACCAGGTACACACAGGG-3'
Ddit3	NM_007837	F	5'-CAGCGACAGAGGCCAGAATAA-3'
		R	5'-GACCAGGTTCTGCTTCAGG-3'
Itgam	NM_008401	F	5'-ATTCGGTGATCCCTTGGATT-3'
		R	5'-GTTTGTGAAGGCATTTCCC-3'

<i>Itga2</i>	NM_008396.3	F	5'-GCGGCTGCTAATGCTAGTTC-3'
		R	5'-CCAACCAGTAGCCAGTTGCC-3'
<i>Klrb1c</i>	NM_001159904.2	F	5'-GGGATGAGTGTCTTAGTGCAG-3'
		R	5'-CCAGTCTTGTGGGCACTCTAAA-3'
<i>Lgals3</i>	NM_010705	F	5'-GTACAGCTAGCGGAGCGG-3'
		R	5'-CGGATATCCTTGAGGGTTG-3'
<i>Myc</i>	NM_010849	F	5'-AGCCCCTAGTGCTGCATGA-3'
		R	5'-GTTTGCCTCTTCTCACAGACA-3'
<i>Nrf2</i>	NM_007527	F	5'-GGACATGGAGCAAGTTGGC-3'
		R	5'-GGCCTCAGCCCATCTCTTC-3'
<i>Ncf1</i>	NM_010876	F	5'-GCCCAAAGATGGCAAGAACAAAC-3'
		R	5'-TAGTCAGCAATGGCCCCGATAG-3'
<i>Pcna</i>	NM_011045	F	5'-AGGAGGCGGTAACCATAGAGA-3'
		R	5'-GAGACAGTGGAGTGGCTTTG-3'
<i>p16</i>	NM_001040654	F	5'-ATGGAGTCCGCTGCAGACAGAC-3'
		R	5'-ACGTTGCCCATCATCATCACCTGA-3'
<i>Spp1</i>	NM_009263	F	5'-CTCCTTGCGCCACAGAAATG-3'
		R	5'-TTGGAAGAGTTCTTGCTTAAAGTCA-3'
<i>Sqstm1</i>	NM_011018	F	5'-GTGGGACAGCCAGAGGAACAG-3'
		R	5'-TGAGGGGTCTAGAGAGCTTGG-3'
<i>Tgf</i>	NM_011577	F	5'-GGAGAGCCCTGGATACCAAC-3'
		R	5'-CAACCCAGGTCTTCTAAA-3'
<i>Timd4</i>	NM_178759.4	F	5'-GTCCGCCTTCACTACAGAACATCA-3'
		R	5'-CTGCAAAGACTCACTTGTTGTT-3'
<i>Tnf</i>	NM_013693	F	5'-CCACCACGCTTCTGTCTAC-3'
		R	5'-AGGGTCTGGGCCATAGAACT-3'
<i>Tnfsf14</i>	NM_019418.4	F	5'-AGCACATCTTACAGGAGCCAAC-3'
		R	5'-AGTAACCGGGCTCCATGGTC-3'
<i>Vsig4</i>	NM_177789.5	F	5'-GCACTCCTCTTGGAAAGCAAC-3'
		R	5'-TCCCTGAACCAGCAATGGTC-3'

F, forward sequence; R, reverse sequence.

*Acta2*, actin a2 smooth muscle aorta

*Afp*, alpha fetoprotein

*Casp1*, caspase 1

*Ccl2, chemokine (C-C motif) ligand 2*  
*Ccnd1, cyclin D1*  
*Cdk4, cyclin-dependent kinase 4*  
*Cd68, CD68 antigen*  
*Clec1b, C-type lectin domain family 1, member b*  
*Clec4f, C-type lectin domain family 4, member f*  
*Col1a1, collagen type I alpha 1 chain*  
*Cxcr3, chemokine (C-X-C motif) receptor 3*  
*Cxcr6, chemokine (C-X-C motif) receptor 6*  
*Ddit3, DNA damage-inducible transcript 3*  
*Itgam, integrin alpha M*  
*Klrb1c, killer cell lectin-like receptor subfamily B member 1C*  
*Lgals3, lectin, galactose binding, soluble 3*  
*Myc, myelocytomatosis oncogene*  
*Nrf2, Nuclear factor erythroid 2-related factor 2*  
*Pcna, proliferating cell nuclear antigen*  
*p16, cyclin dependent kinase inhibitor 2A*  
*Ncf1, Neutrophil cytosol factor 1*  
*Spp1, secreted phosphoprotein 1*  
*Sqstm1, sequestosome 1*  
*Tgf, transforming growth factor beta 1*  
*Timd4, T cell immunoglobulin and mucin domain containing 4*  
*Tnf, tumor necrosis factor alpha*  
*Tnfsf14, tumor necrosis factor (ligand) superfamily, member 14*  
*Vsig4, V-set and immunoglobulin domain containing 4*

**Supplementary Figure S1. Experimental design and time course of weight change in C57BL/6J mice fed OYC-NASH2 diet.**

**(A)** C57BL/6J mice were divided into two groups, the control group ( $n=41$ ) was fed a AIN93M diet and the OYC-NASH2 group ( $n=74$ , two mice died at 60 weeks) was fed the OYC-NASH2 diet for 60 weeks. **(B)** Body weight and some organ weight ratios of mice during the feeding period. Data are expressed as the means  $\pm$  SEM. \* $P < 0.05$ , \*\* $P < 0.01$  and \*\*\* $P < 0.001$  between AIN93M diet group and OYC-NASH2 diet group. Con, control; eWAT, epididymal white adipose tissue; W, week of the treatment.

