

# Effects of long-term DHA supplementation and physical exercise on non-alcoholic fatty liver development in obese aged female mice

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Table S1. Diets composition.

Diet	Standard HFD		HFD with DHA-rich n-3 PUFA Concentrate (containing mixed tocopherols*)		Standard HFD (with same amount of mixed tocopherols added)**	
	D12451		D16112301		D16112302	
Product #	g	kcal	g	kcal	g	kcal
%						
Protein	23.7	20	23.7	20	23.7	20
Carbohydrate	41.4	35	41.4	35	41.4	35
Fat	23.6	45	23.6	45	23.6	45
Total		100		100		100
kcal/g	4.73		4.73		4.73	
Ingredient						
Casein, 30 Mesh	200	800	200	800	200	800
L-Cystine	3	12	3	12	3	12
Corn Starch	72.8	291	72.8	291	72.8	291
Maltodextrin 10	100	400	100	400	100	400
Sucrose	172.8	691	172.8	691	172.8	691
Cellulose, BW200	50	0	50	0	50	0
Soybean Oil	25	225	25	225	25	225
Lard	177.5	1598	147.1	1324	177.5	1598
High DHA Oil (Solutex 0063TG)*	0	0	30.4*	274	0	0
Mineral Mix S10026	10	0	10	0	10	0
DiCalcium Phosphate	13	0	13	0	13	0
Calcium Carbonate	5.5	0	5.5	0	5.5	0
Potassium Citrate, 1 H <sub>2</sub> O	16.5	0	16.5	0	16.5	0
Vitamin Mix V10001	10	40	10	40	10	40
Choline Bitartrate	2	0	2	0	2	0
Mixed tocopherols	0	0	0	0	0.061	0
Total	858.15	4057	858.15	4057	858.21	4057

\*The DHA-rich n-3 PUFA concentrate contains 2 mg/g of mixed tocopherols to prevent oxidation. \*\*A standard high fat diet (HFD) including the same amount of tocopherols contained in the HFD formulated with the DHA-rich concentrate was prepared. Diets were formulated and prepared by Research Diets Inc.

**Table S2.** Mouse primers sequences for SYBR GREEN real-time PCR.

<b>Gene</b>	<b>Species</b>	<b>Forward primer sequence (5' - 3')</b>	<b>Reverse primer sequence (5' - 3')</b>
<i>36b4</i>	<i>Mus musculus</i>	CACTGGTCTAGGACCCGAGAAG	GGTGCCTCTGGAGATTTTCG
<i>Fas</i>	<i>Mus musculus</i>	GCTGCGGAAACTTCAGGAAAT	AGAGACGTGTCACTCCTGGACTT
<i>Srebp1c</i>	<i>Mus musculus</i>	GGCCCGGGAAGTCACTGT	GGAGCCATGGATTGCACATT
<i>Dgat2</i>	<i>Mus musculus</i>	CCGCAAAGGCTTTGTGAAG	GGAATAAGTGGGAACCAGATCA
<i>Acox</i>	<i>Mus musculus</i>	CTATGGGATCAGCCAGAAAG	AGTCAAAGGCATCCACCAA
<i>Cpt1a</i>	<i>Mus musculus</i>	CACCAACGGGCTCATCTTCTA	CAAAATGACCTAGCCTTCTATCGAA
<i>PPAR<math>\alpha</math></i>	<i>Mus musculus</i>	TCAGGGTACCACTACGGAGT	CTTGGCATTCTTCCAAAGCG
<i>Atg5</i>	<i>Mus musculus</i>	CGTGTATGAAAGAAGCTGATGC	ACGAAATCCATTTTCTTCTGGA
<i>Atg7</i>	<i>Mus musculus</i>	ATGCCAGGACACCCTGTGAACTTC	ACATCATTGCAGAAGTAGCAGCCA
<i>Xbp1</i>	<i>Mus musculus</i>	ATCAGCTTTTACGGGAGAAAATC	CCATTCCCAAGCGTGTCTT
<i>Ern1</i>	<i>Mus musculus</i>	GGTCCAATCGTACGGCAGTT	TCTCTCACAGAGCCACCTTTGTAG
<i>Tnfr1</i>	<i>Mus musculus</i>	CATCTTCTCAAATTCGAGTGACAA	TGGGAGTAGACAAGGTACAACCC
<i>Tlr4</i>	<i>Mus musculus</i>	TCGAATCCTGAGCAAACAGC	GTGGACGGGTTCGATGTCAC
<i>Hsl</i>	<i>Mus musculus</i>	CTGCTTCTCCCTCTCGTCTG	CAAAATGGTCTCTGCCTCT

**Table S3.** Mouse primers references for Taqman real-time PCR.

<b>Gene</b>	<b>Species</b>	<b>Reference</b>
<i>Mcp1</i>	<i>Mus musculus</i>	Mm00441242_m1
<i>Il6</i>	<i>Mus musculus</i>	Mm00446190_m1
<i>Scd1</i>	<i>Mus musculus</i>	Mm00772290_m1