

SUPPLEMENTAL MATERIAL

Supplemental Table S1: Composition of Test Diets

Ingredients (%)	Saturated fat diet	Unsaturated fat diet	Trans fat diet
Cocoa Butter	23.3060	0	0
Canola Oil	0	13.2265	0
Palm Olein Oil	0	7.8536	0
Hydrogenated Soy Oil	0	0	21.0800
Casein- Vitamin Tested	23.3060	23.3059	23.3060
Sucrose	19.7090	19.7090	19.7090
Maltodextrin	11.6530	11.6530	11.6530
Dextrin	8.4830	8.4830	8.4830
Powdered Cellulose	5.8270	5.8270	5.8270
Soybean Oil	2.9200	2.9200	2.9200
Potassium Citrate, Tribasic Monohydrate	1.9230	1.9230	1.9230
Calcium Phosphate	1.5150	1.5150	1.5150
AIN-76A Vitamin Mix	1.1650	1.1650	1.1650
DIO Mineral Mix	1.1650	1.1650	1.1650
Calcium Carbonate	0.6410	0.6410	0.6410
L-Cystine	0.3500	0.3500	0.3500
Choline Bitartate	0.2330	0.2330	0.2330
FD&C Yellow 6 Lake (Orange)	0.0300	0.0300	0.0300

Supplemental Table S2: Primer sequences of genes

Genes	Forward primer	Reverse primer
m36B4	ATGGGTACAAGCGCGTCCTG	GCCTTGACCTTTTCAGTAAG
mGrp78(BIP)	AGGACAAGAAGGAGGATGTGGG	ACCGAAGGGTCATTCCAAGTG
mGrp94	AAACGGCAACACTTCGGTCAG	GCATCCATCTCTTCTCCCTCATC
mXbp1	GCAGCAAGTGGTGGATTTGG	AGATGTTCTGGGGAGGTGACAAC
mXbp1s	GAGTCCGCAGCAGGTG	GTGTCAGAGTCCATGGGA
mDdit3	CTGGAAGCCTGGTATGAGGAT	CAGGGTCAAGAGTAGTGAAGGT
mDdi4	CAAGGCAAGAGCTGCCATAG	CCGGTACTTAGCGTCAGGG
mGdf15	CTGGCAATGCCTGAACAACG	GGTCGGGACTTGGTTCTGAG
mCxcl2	CCAACCACCAGGCTACAGG	GCGTCACACTCAAGCTCTG
mPtgs2	TTCAACACACTCTATCACTGGC	AGAAGCGTTTGCGGTACTCAT
mErn1	ACACCGACCACCGTATCTCA	CTCAGGATAATGGTAGCCATGTC
mHerpud1	CCTGGCTTCTCTGGCTACAC	GTCGGGACAAAAGTTCCTGA
mHaptoglobin	GCTATGTGGAGCACTTGGTTC	CACCCATTGCTTCTCGTCGTT
mLipocalin2	TGGAAGAACCAAGGAGCTGT	GGTGGGGACAGAGAAGATGA
mSAA2	GCGAGCCTACACTGACATGA	TTTTCTCAGCAGCCCAGACT
mTNFa	CTTCCATCCAGTTGCCTTCTTG	AATTAAGCCTCCGACTTGTGAAG
mIL6	CAACCTCCTCTCTGCCGTCAA	TGACTCCAAAGTAGACCTGCCC
mCD68	CCAATTCAGGGTGGAAGAAA	CTCGGGCTCTGATGTAGGTC

Supplemental Table S3: Detailed fatty acid profile of diets

Fatty acids	Saturated (%)	Cis-Unsaturated (%)	Trans-Unsaturated (%)
C 14:0	0.18	0.44	0.14
C 14:1 9t	0	0	0
C 14:1 9c	0	0	0
C 16:0	23.76	16.16	11.01
C 16:1 9t	0	0	0
C 16:1 9c	0.18	0.26	0
C 17:0	0.28	0	0.17
C 17:1 10c	0	0	0
C 18:0	31.59	2.99	8.23
C 18:1 7+8t	0.11	0	4.28
C 18:1 9t	0	0.11	3.33
C 18:1 11t	0	0	6.66
C 18:1 5c+7c+12t	0	0	5.03
C 18:1 9c+13t	30.98	49.24	23.84
C 18:1 11c+15t	0.87	2.54	2.05
C 18:1 12c	0	0.23	6.85
C 18:1 13c	0	0.10	0.91
C 18:1 15c	0	0	0.65
C 18:2 tt	0	0	0.78
C 18:2 ct	0	0.19	0
C 18:2 tc	0	0.11	0
C 18:2 cc	9.67	19.96	7.56
C 18:3 ttt	0	0	0
C 20:0	1.10	0.55	0.31
C 18:3 tct	0	0	0
C 18:3 ctt	0	0	0
C 18:3 ctc	0	0.09	0
C 18:3 tcc	0	0.19	0
C 18:3 ccc	1.16	5.03	1.00
C 20:1 11c	0	0.84	0.21
Unspecified cis/trans	0	0	11.01
Other unknown fatty acids	0.14	1.04	6.03

Supplemental Table S4: Overview of clinical observations in *Angptl4*^{-/-} mice fed the different diets

	<u>Saturated fat</u>	<u>Unsaturated fat</u>	<u>Trans fat</u>
Touton giant cells	Yes (6/7)	No (0/5)	Yes (9/13)
Enlarged lymph nodes	Yes, massive	Yes, slightly	Yes, slightly
SAA elevated	Yes	No	No
Chylous ascites	Yes	No	No
Weight loss	Yes	No	No