Electronic Supplementary Material (ESI) for Food & Function.

Table S1 Main fatty acid compositions of DHA/EPA-PL

Fatty acids (%)	DHA/EPA-PL
C16:0	4.34
C16:1	5.32
C18:0	15.7
C18:1	7.90
C18:2n-6	--
C18:3n-3	--
C20:0	--
C20:1	10.8
C20:2	--
C20:3	--
C20:4n-6	5.30
C20:5n-3	49.3
C22:1	--
C22:6n-3	0.69

Note: "--", none detected.

Table S2 Ingredient of experimental diets

Ingredients (g/kg)	Sed	Exe	Ast	PL	L-C
Casein	200	200	200	200	200
Cornstarch	499.5	499.5	499.5	495	499.5
Sucrose	130	130	130	129	130
Corn oil	70	70	70	69.4	70
Mineral-salt mix	35	35	35	35	35
Vitamin mix	10	10	10	10	10
Cellulose	50	50	50	50	50
Choline bitartrate	2.5	2.5	2.5	2.5	2.5
L-methionine	3	3	3	3	3
DHA/EPA- PL	--	--	--	5.9	--
L-carnitine	--	--	--	--	5

Note: “–”, none add.

Table S3 Sequences of the primers used in the quantitative RT-PCR

Gene	Forward Primers 5'-3'	Reverse Primers 5'-3'
Ndufb3	TTTGCTGCGTTTGTGGTAGC	TGGAAGAGACGTCACAAGGC
Ndufb7	GGTGACCCCGGCTACTAAAG	CAGTAGTCCCAGTCGTGCTG
Ndufs3	ATCCCGATGGAGTCATCCCA	CCGTCAAGTCAGCCAAGGAT
Ndufv1	GAACAAGGTGATGGCCCGAT	CCCATCACCCAGAGCACAAA
Sdhb	GCAGTTTCAGGCCTGTCGAG	CAACACCATAGGTCCGCACT
Sdhd	GTTCTGCTCTTGGGGCTGAT	TGAAGTAGCAAAGCCCAGCA
Uqcrfs1	ATGTGAAGCGACCCTTCCTG	TATGGCGCACAAACAGAGGT
Uqcr11	TGCTGAGCAGGTTTCTAGGC	CCAGTGTCCAGCTTCCTCAG
Cox 4i	GGATTCGCAGCTCTGGTGAT	CTCGTCCGTCAAGGTGATCG
Cox 5b	TGCACAAAGGCGAGAGTCAG	CTCAGTGGGCCATTTGGTGG
Apt 5i	CTCATCAAGTTCGGCCGGTA	CATCTTGAGTGTAGCGCTTGG
Apt 5o	TCCCATACACAACCGCAGTC	GGTCACTGGAAGATATGGCAC
Vdac1	CCCCATTCCAGAAAGGGTCC	AGAAAACCACACCACAACACA
Pdhb	AGGCACAAGATGTGAGGGTG	AACTCCTGGTTTGCCACTGA
Idh3b	ATTAGTGTCAAGCTGGGTGGT	ACTGACCAGTCTCTGATGTGC
Dlat	ACACCTCTCCTAGGGCCTTT	CAGTGTCGTAAAAGCGGCTG
Fh1	TCTGACGTATTAGGGGGCG	GCATACGTTCCGTAGCACCT
Mdh1	TCAGGAAAACAAGTTTGCCCAAT	TGAGCAAAACATGAACCAACC
GLUT4	CAGATCGGCTCTGACGATGG	GCCACGTTGCATTGTAGCTC
GK	ACCAGCCGTGTTAAGCTCTC	TTCCCTCTGGTTGCTGACAC
FOXO1	AGTGGATGGTGAAGAGCGTG	CTTTCCAGTTCCTTCATTCTGC
G6PDH	GTTTGGCAGCGGCAACTAA	GGCATCACCCTGGTACAACTC
AKT	TTCTACAACCAGGACCACGAGC	TGATGCTGAGGAAGAACCGATG
PGC-1a	AGCCAAACCAACAACTTTATCTCTT C	TTAAGGTTCGCTCAATAGTCTTGTT C
PPARa	GTACGGCAATGGCTTTATCA	CAATCCCCTCCTGCAACTT
CPT-1b	GCCAGGAGGTCATAGAGACAT	GAGTCATGGAAGCCTCATACG

ACOX1	GTATAAACTCTTCCCGCTCCTG	CCAGGTAGTAAAAGCCTTCAGC
Acaala	TCAGGTGAGTGATGGAGCAG	CACACAGTAGACGGCCTGAC
Ehhadh	ATGGCCAGATTTCAGGAATG	TGCCACTTTTGTTGATTTGC
Hsd17b4	GAGCAGGATGGATTGGAAAA	TGACTGGTACGGTTTGGTGA
CD36	GATGACGTGGCAAAGAACAG	CAGTGAAGGCTCAAAGATGG
β-actin	CAGGCATTGCTGACAGGATG	TGCTGATCCACATCTGCTGG