

Fish oil intake induces UCP1 upregulation in brown and white adipose tissue via the sympathetic nervous system

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Supplemental table 1. Organ weights in 16-week-old male C57BL mice

mg/gBW	C	LD	HD	LE	HE
Inguinal WAT	24.7±0.7 ^a	22.8±1.2 ^{ab}	22.1±1.5 ^b	20.3±1.0 ^b	19.3±1.6 ^b
Epididymal WAT	48.2±2.6 ^{ab}	34.5±2.8 ^b	37.4±3.5 ^b	37.7±3.6 ^b	35.0±2.9 ^b
Mesenteric WAT	15.4±1.0 ^a	11.6±1.0 ^b	12.8±1.0 ^b	15.5±1.3 ^{ab}	9.9±1.8 ^b
Renal WAT	20.9±0.8 ^a	16.5±0.8 ^b	16.3±1.2 ^b	12.0±0.6 ^b	14.7±1.4 ^b
Interscapular BAT	4.2±0.3 ^a	3.4±0.2 ^b	3.6±0.2 ^b	3.5±0.2 ^b	3.4±0.4 ^b
Liver	37.2±0.7 ^a	36.0±1.6 ^a	37.4±1.5 ^a	36.4±0.7 ^a	36.7±1.0 ^a
Gastrocnemius	11.1±0.5 ^a	11.0±0.5 ^a	11.0±0.7 ^a	12.0±0.6 ^a	11.8±0.5 ^a

Different letters were indicated significant differences among groups.

Supplemental table 2. Plasma concentrations of various parameters in 16-week-old male C57BL mice

	C	LD	HD	LE	HE
TG (mg/dL)	105.2±5.2 ^a	75.5±3.9 ^b	74.0±2.6 ^b	80.9±6.4 ^b	77.9±3.0 ^b
Adiponectin (µg/mL)	7.0±0.4 ^a	8.8±0.3 ^b	9.4±0.5 ^b	8.8±0.4 ^b	9.3±0.5 ^b
Leptin (µg/mL)	33.7±4.0 ^a	24.5±1.9 ^b	26.8±1.2 ^b	25.6±1.2 ^b	21.2±4.4 ^b
Glucose (mg/dL)	222.4±8.1 ^a	199.3±7.7 ^b	192.3±7.2 ^b	192.5±5.2 ^b	178.3±9.6 ^b
Insulin (ng/mL)	1.0±0.1 ^a	0.5±0.1 ^b	0.4±0.1 ^b	0.4±0.1 ^b	0.6±0.1 ^b

Different letters were indicated significant differences among groups.

Supplemental table 3. Plasma concentrations of glucose and TG in 16-week-old male C57BL and TRPV1 KO mice

	WT-C	WT-D	WT-E
Glucose (mg/dL)	220.9±4.3 ^a	195.9±7.7 ^b	193.8±9.9 ^b
TG (mg/dL)	74.4±2.0 ^a	61.0±2.3 ^b	63.5±2.7 ^b

	KO-C	KO-D	KO-E
Glucose (mg/dL)	215.3±9.7 ^a	222.1±15 ^a	218.7±8.1 ^a
TG (mg/dL)	63.0±4.1 ^a	62.0±2.8 ^a	59.8±6.1 ^a

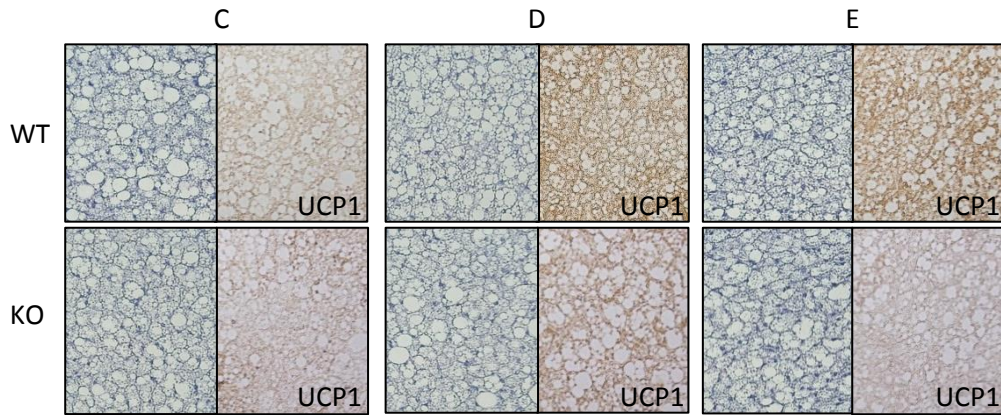
Different letters were indicated significant differences among groups.

Supplemental table 4. Composition of experimental diets

Ingredients (g/100 g)	C	LD	HD	LE	HE
Casein	15	15	15	15	15
L-cystine	0.4	0.4	0.4	0.4	0.4
Corn starch	10.9	10.9	10.9	10.9	10.9
Maltodextrin	11.7	11.7	11.7	11.7	11.7
Sucrose	25.8	25.8	25.8	25.8	25.8
Cellulose	5.9	5.9	5.9	5.9	5.9
Corn oil	2.9	2.9	2.9	2.9	2.9
Lard	20.9	19.7	18.5	19.7	18.5
Fish oil	-	1.2	2.4	1.2	2.4
Mineral mixture	5.3	5.3	5.3	5.3	5.3
Vitamin mixture	1.2	1.2	1.2	1.2	1.2

Supplemental figure 1. Representative images of immunohistochemistry for UCP1 in interscapular BAT (A) and inguinal WAT (B). Left, Hematoxylin and eosin staining. Right, immunostaining with UCP1 antibody. Origin magnification, X200.

A interscapular BAT



B inguinal WAT

