

Table S1. Total fatty acids compositions of purified diets (mg/g)-in situ transesterification.

	SD	HFD	HFD+FO
C14:0 Myristic	2.20 ± 0.20	4.43 ± 0.24	8.51 ± 0.33
C16:0 Palmitic	9.21 ± 1.56	58.25 ± 1.10	56.69 ± 1.55
C16:1 Palmitoleic	0.55 ± 0.12	4.84 ± 0.09	11.98 ± 0.31
C18:0 Stearic	3.55 ± 0.60	27.73 ± 0.43	23.69 ± 0.66
C18:1 Oleic	13.50 ± 2.24	90.83 ± 5.04	75.38 ± 2.06
C18:2 Linoleic	12.42 ± 2.06	50.36 ± 1.04	42.65 ± 1.09
C18:3 Linolenic	0.52 ± 0.09	2.91 ± 0.06	3.06 ± 0.09
C20:0 Arachidic	0.11 ± 0.02	0.41 ± 0.01	0.42 ± 0.02
C20:4 Arachidonic	0.05 ± 0.00	0.43 ± 0.01	0.87 ± 0.02
C20:5 EPA	0.00 ± 0.00	0.03 ± 0.01	8.03 ± 0.19
C22:0 Behenic	0.03 ± 0.00	0.07 ± 0.01	0.15 ± 0.01
C22:6 DHA	0.01 ± 0.01	0.06 ± 0.01	6.46 ± 0.14
C24:0 Lignoceric	0.04 ± 0.00	0.05 ± 0.00	0.09 ± 0.01
C24:1 Selacholeic	0.00 ± 0.00	0.03 ± 0.00	0.19 ± 0.01
TOTAL	42.19 ± 6.85	240.43 ± 7.93	238.17 ± 6.35

SD – Standard diet - control; HFD – High-fat diet; HFD+FO – High-fat diet + fish oil;
 EPA – Eicosapentaenoic acid; DHA – Docosahexaenoic acid.
 Values are expressed as mean ± standard deviation.

Table S2. The quality and quantity of total RNA in visceral and subcutaneous adipose tissue.

SD		HFD			HFD+FO		
<i>Visceral</i>							
Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280	Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280	Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280		
1.1	0.1876	2.08	2.1	0.1254	2.07	3.1	0.0911
1.2	0.1284	2.10	2.2	0.1096	2.07	3.2	0.0641
1.3	0.1263	2.09	2.3	0.0998	2.08	3.3	0.0827
1.4	0.1021	2.11	2.4	0.0924	2.09	3.4	0.0581
1.5	0.0753	2.07	2.5	0.0925	2.09	3.5	0.0898
1.6	0.1326	2.08	2.6	0.1044	2.11	3.6	0.0958
1.7	0.0901	2.10	2.7	0.1258	1.86	3.7	0.0868
1.8	0.0930	2.10	2.8	0.1275	2.07	3.8	0.0965
<i>Subcutaneous</i>							
Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280	Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280	Concentration ($\mu\text{g}/\mu\text{l}$)	Ratio 260/280		
1.1	0.1216	2.10	2.1	0.1769	2.09	3.1	0.1180
1.2	0.4126	2.06	2.2	0.1380	2.08	3.2	0.1106
1.3	0.0737	2.12	2.3	0.0812	2.12	3.3	0.1114
1.4	0.3433	2.07	2.4	0.2201	2.10	3.4	0.2473
1.5	0.2951	2.07	2.5	0.1392	2.09	3.5	0.0768
1.6	0.1618	2.10	2.6	0.0956	2.11	3.6	0.1508
1.7	0.0969	2.09	2.7	0.2145	2.10	3.7	0.1268
1.8	0.1246	2.10	2.8	0.2142	2.09	3.8	0.1040

Western blot analysis

All western blots were performed as described below. "Exposure Time (sec)" was individually set for particular proteins. The sequence of application the samples into the gel wells (n=8 in each group):

- 1st lane – Protein standard
- 2nd lane – Empty lane
- 3rd lane – SD sample
- 4th lane – HFD sample
- 5th lane – HFD+FO sample
- 6th lane... repeats according to the system described above

Figure S1. Visceral adipose tissue CPT1 B protein expression with reference gene GAPDH-exposure time 14.0 s.

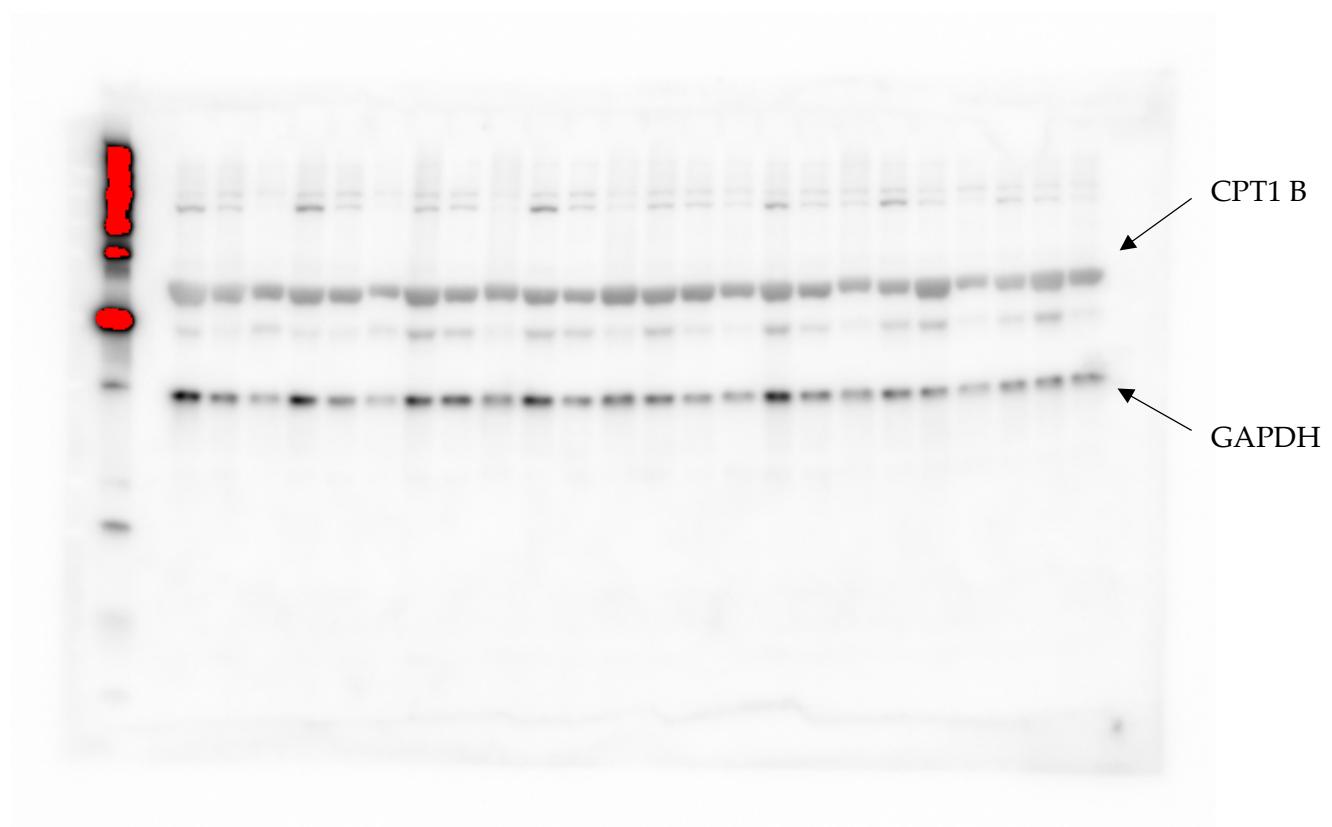


Figure S2. Subcutaneous adipose tissue CPT1 B protein with reference gene GAPDH-exposure time 30.0 s.

