

Sup. Table 1. Fatty acid content changes in liver tissue of 36% HFD-fed mice.

Fatty acids	Fatty acid content of liver (%)			
	Control	36%HFD	CRS	36% HFD+CRS
C13:0 (Tridecylic acid)	0.17 ± 0.06	0.15 ± 0.05	0.04 ± 0.03	0.00 ± 0.00
C14:0 (Myristate acid)	0.21 ± 0.03	0.17 ± 0.04	0.13 ± 0.04	0.09 ± 0.04
C15:1 (cis-10-Pentadecenoate acid)	0.27 ± 0.04	0.27 ± 0.05	0.32 ± 0.06	0.38 ± 0.04
C16:0 (Palmitic acid)	27.15 ± 0.43	26.47 ± 0.88	27.23 ± 0.41	28.19 ± 0.33##
C16:1 (Palmitoleic acid)	1.68 ± 0.12	1.04 ± 0.08	0.97 ± 0.14	0.89 ± 0.08
C17:0 (Heptadecanoate acid)	0.15 ± 0.04	0.24 ± 0.04	0.11 ± 0.05	0.12 ± 0.05
C17:1 (cis-10-Heptadecenoate acid)	0.00 ± 0.00	0.01 ± 0.01	0.00 ± 0.00	0.00 ± 0.00
C18:0 (Stearic acid)	10.69 ± 0.47	11.59 ± 0.67	13.82 ± 0.44***	13.8 ± 0.41***
C18:1n9t (Elaidic acid)	0.21 ± 0.08	0.22 ± 0.06	0.12 ± 0.03	0.33 ± 0.04
C18:1n9c (Oleic acid)	11.30 ± 0.99	15.36 ± 1.06**	10.98 ± 0.79##	11.67 ± 0.49##
C18:2n6t (Linolelaidic acid)	0.85 ± 0.12	0.68 ± 0.25	0.67 ± 0.06	0.38 ± 0.06
C18:2n6c (Linoleic acid)	19.14 ± 0.47	19.86 ± 0.89	16.43 ± 0.60***	15.71 ± 0.38***
C18:3n6 (γ-Linolenic acid)	0.12 ± 0.02	0.17 ± 0.02	0.12 ± 0.05	0.13 ± 0.03
C18:3n3 (α-Linolenic acid)	0.45 ± 0.06	0.32 ± 0.05	0.16 ± 0.05	0.16 ± 0.03
C20:0 (Arachidic acid)	0.08 ± 0.02	0.19 ± 0.03	0.14 ± 0.05	0.16 ± 0.03
C20:1(cis-11-Eicosenoate acid)	0.14 ± 0.03	0.19 ± 0.05	0.19 ± 0.08	0.21 ± 0.05
C20:2 (cis-11,14-Eicosadienoic acid)	0.08 ± 0.04	0.48 ± 0.15	0.2 ± 0.12	0.00 ± 0.00
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	1.07 ± 0.09	0.97 ± 0.12	1.07 ± 0.05	1.33 ± 0.06
C20:4n6(Arachidonic acid)	12.64 ± 0.62	11.68 ± 1.44	15.34 ± 0.55***	15.55 ± 0.16***
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	0.05 ± 0.03	0.00 ± 0.00	0.12 ± 0.05	0.00 ± 0.00
C22:1n9 (Erucic acid)	0.05 ± 0.05	0.09 ± 0.06	0.12 ± 0.06	0.00 ± 0.00
C24:1 (Nervonic acid)	0.51 ± 0.05	0.24 ± 0.05	0.72 ± 0.20	0.28 ± 0.06
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	11.06 ± 0.39	8.13 ± 0.98**	13.28 ± 0.41***	10.54 ± 0.21###

Compared with the control group, ** p <0.01; compared with the HFD group, ## p <0.01; compared with the CRS group, ++ P < 0.01.

Sup. Table 2. Fatty acid content changes in epididymal adipose of 36% HFD-fed mice.

Fatty acids	Fatty acid content of epididymal adipose (%)			
	Control	36%HFD	CRS	36% HFD+CRS
C10:0 (Decanoate acid)	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00
C11:0 (Undecanoic acid)	0.05 ± 0.01	0.05 ± 0.01	0.06 ± 0.00	0.06 ± 0.00
C14:0 (Myristate acid)	1.10 ± 0.03	0.88 ± 0.06	1.18 ± 0.02	1.13 ± 0.02
C14:1 (Myristoleate acid)	0.06 ± 0.01	0.04 ± 0.00	0.06 ± 0.00	0.06 ± 0.00
C15:0 (Pentadecanoate acid)	0.11 ± 0.01	0.08 ± 0.00	0.13 ± 0.00	0.08 ± 0.01
C15:1 (cis-10-Pentadecenoate acid)	0.15 ± 0.03	0.09 ± 0.01	0.15 ± 0.02	0.11 ± 0.01
C16:0 (Palmitic acid)	21.92 ± 0.55	15.84 ± 0.90**	21.76 ± 1.30 ^{##}	20.90 ± 0.53 ^{##}
C16:1 (Palmitoleic acid)	5.16 ± 0.45	4.80 ± 0.09	5.38 ± 0.58	4.43 ± 0.20
C17:0 (Heptadecanoate acid)	0.18 ± 0.01	0.14 ± 0.01	0.17 ± 0.01	0.18 ± 0.00
C17:1 (cis-10-Heptadecenoate acid)	0.19 ± 0.02	0.20 ± 0.00	0.21 ± 0.02	0.17 ± 0.02
C18:0 (Stearic acid)	3.03 ± 0.22	2.88 ± 0.22	2.88 ± 0.33	3.20 ± 0.48
C18:1n9t (Elaidic acid)	0.27 ± 0.17	0.00 ± 0.00	0.06 ± 0.01	0.01 ± 0.01
C18:1n9c (Oleic acid)	30.66 ± 1.21	47.99 ± 1.42**	31.01 ± 1.87 ^{##}	42.14 ± 0.63 ^{***##++}
C18:2n6t (Linolelaidic acid)	0.43 ± 0.39	0.00 ± 0.00	0.80 ± 0.72	0.02 ± 0.02
C18:2n6c (Linoleic acid)	31.77 ± 0.61	23.98 ± 0.30**	30.87 ± 1.19 ^{##}	23.73 ± 0.18 ^{***++}
C18:3n6 (γ-Linolenic acid)	0.20 ± 0.06	0.20 ± 0.03	0.24 ± 0.06	0.16 ± 0.02
C18:3n-3 (α-Linolenic acid)	1.66 ± 0.06	0.67 ± 0.08	1.65 ± 0.06	1.11 ± 0.04
C20:0 (Arachidic acid)	0.19 ± 0.05	0.13 ± 0.02	0.28 ± 0.03	0.21 ± 0.01
C20:1 (cis-11-Eicosenoate acid)	1.44 ± 0.07	1.03 ± 0.07	1.39 ± 0.12	1.16 ± 0.03
C20:2 (cis-11,14-Eicosadienoic acid)	0.02 ± 0.01	0.03 ± 0.01	0.03 ± 0.00	0.02 ± 0.01
C21:0 (Heneicosanoate acid)	0.18 ± 0.05	0.33 ± 0.01	0.22 ± 0.02	0.35 ± 0.02
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	0.16 ± 0.01	0.16 ± 0.01	0.21 ± 0.00	0.18 ± 0.00
C20:4n6 (Arachidonic acid)	0.14 ± 0.10	0.00 ± 0.00	0.00 ± 0.00	0.22 ± 0.03
C20:3n3 (cis-11,14,17-Eicosatrienoic acid)	0.29 ± 0.07	0.19 ± 0.03	0.53 ± 0.08	0.00 ± 0.00
C22:0 (Behenic acid)	0.03 ± 0.01	0.01 ± 0.00	0.04 ± 0.01	0.03 ± 0.00
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	0.04 ± 0.00	0.01 ± 0.00	0.05 ± 0.01	0.02 ± 0.00
C22:1n9 (Erucic acid)	0.10 ± 0.02	0.09 ± 0.01	0.14 ± 0.02	0.10 ± 0.01
C22:2 (cis-13,16-Docosadienoic acid)	0.04 ± 0.04	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
C24:1 (Nervonic acid)	0.07 ± 0.01	0.03 ± 0.00	0.09 ± 0.01	0.05 ± 0.01
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	0.34 ± 0.01	0.12 ± 0.02	0.42 ± 0.03	0.18 ± 0.03

Compared with the control group, ** $p < 0.01$; compared with the HFD group, ## $p < 0.01$; compared with the CRS group, ++ $P < 0.01$.

Sup. Table 3. Fatty acid content changes in brain tissue of 36% HFD-fed mice.

Fatty acids	Fatty acid content of brain (%)			
	Control	36%HFD	CRS	36% HFD+CRS
C13:0 (Tridecylic acid)	0.57 ± 0.12	0.65 ± 0.20	0.63 ± 0.15	0.61 ± 0.11
C14:0 (Myristate acid)	0.12 ± 0.03	0.07 ± 0.00	0.07 ± 0.00	0.07 ± 0.00
C15:0 (Pentadecanoate acid)	0.03 ± 0.00	0.02 ± 0.01	0.03 ± 0.00	0.03 ± 0.00
C15:1 (cis-10-Pentadecenoate acid)	0.19 ± 0.07	0.25 ± 0.01	0.38 ± 0.11	0.31 ± 0.07
C16:0 (Palmitic acid)	24.73 ± 0.22	24.03 ± 0.20	23.85 ± 0.11*	24.11 ± 0.30
C16:1 (Palmitoleic acid)	0.47 ± 0.04	0.36 ± 0.01	0.37 ± 0.01	0.35 ± 0.01
C17:0 (Heptadecanoate acid)	0.17 ± 0.01	0.17 ± 0.01	0.19 ± 0.00	0.17 ± 0.01
C17:1 (cis-10-Heptadecenoate acid)	0.05 ± 0.03	0.02 ± 0.01	0.03 ± 0.01	0.02 ± 0.01
C18:0 (Stearic acid)	22.42 ± 0.35	21.88 ± 0.12	21.71 ± 0.31	22.18 ± 0.24
C18:1n9c (Oleic acid)	18.19 ± 0.37	17.11 ± 0.33**	17.31 ± 0.59*	17.61 ± 0.38
C18:2n6t (Linolelaidic acid)	1.44 ± 0.55	2.18 ± 0.12	2.20 ± 0.29	2.33 ± 0.70**
C18:2n6c (Linoleic acid)	1.83 ± 0.55	4.60 ± 0.41**	4.47 ± 0.45**	3.14 ± 1.31**###++
C20:0 (Arachidic acid)	0.18 ± 0.01	0.17 ± 0.01	0.15 ± 0.01	0.16 ± 0.00
C20:1 (cis-11-Eicosenoate acid)	1.15 ± 0.06	1.10 ± 0.05	1.11 ± 0.09	1.06 ± 0.02
C20:2 (cis-11,14-Eicosadienoic acid)	0.12 ± 0.04	0.16 ± 0.00	0.16 ± 0.01	0.16 ± 0.02
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	0.49 ± 0.02	0.49 ± 0.00	0.49 ± 0.02	0.49 ± 0.02
C20:4n6 (Arachidonic acid)	9.71 ± 0.16	9.26 ± 0.14	9.29 ± 0.15	9.66 ± 0.17
C22:0 (Behenic acid)	0.07 ± 0.00	0.05 ± 0.02	0.05 ± 0.02	0.05 ± 0.02
C22:1n9 (Erucic acid)	0.28 ± 0.02	0.25 ± 0.01	0.17 ± 0.06	0.23 ± 0.02
C24:1 (Nervonic acid)	0.12 ± 0.01	0.10 ± 0.00	0.11 ± 0.04	0.12 ± 0.01
C22:6n3 (cis-4,7,10,13,16,19-Docosahexaenoic acid)	17.63 ± 0.21	16.94 ± 0.15	17.12 ± 0.16	16.95 ± 0.20

Compared with the control group, * p <0.05, ** p <0.01; compared with the HFD group, ### p <0.01; compared with the CRS group, ++ P < 0.01.

Sup. Table 4. Fatty acid content changes in serum of 36% HFD-fed mice.

Fatty acids	Fatty acid content of serum (%)			
	Control	36%HFD	CRS	36% HFD+CRS
C15:1 (cis-10-Pentadecenoate acid)	0.56 ± 0.07	0.65 ± 0.07	0.89 ± 0.13	0.69 ± 0.08
C16:0 (Palmitic acid)	31.24 ± 0.37	29.14 ± 0.51**	28.69 ± 0.19**	28.21 ± 0.21***
C16:1 (Palmitoleic acid)	1.09 ± 0.10	0.44 ± 0.07	0.94 ± 0.18	0.54 ± 0.06
C17:0 (Heptadecanoate acid)	0.24 ± 0.01	0.26 ± 0.02	0.27 ± 0.03	0.22 ± 0.02
C18:0 (Stearic acid)	16.17 ± 0.17	17.59 ± 0.48**	15.55 ± 0.45##	17.99 ± 0.29***++
C18:1n9c (Oleic acid)	11.42 ± 0.33	9.86 ± 0.61**	10.98 ± 0.58##	11.25 ± 0.30##
C18:2n6t (Linolelaidic acid)	0.95 ± 0.27	1.37 ± 0.23	1.46 ± 0.18	1.35 ± 0.22
C18:2n6c (Linoleic acid)	18.90 ± 0.45	19.96 ± 0.42	19.95 ± 0.43	21.04 ± 0.76***++
C18:3n6 (γ-Linolenic acid)	0.01 ± 0.01	0.05 ± 0.03	0.00 ± 0.00	0.00 ± 0.00
C18:3n3 (α-Linolenic acid)	0.29 ± 0.02	0.19 ± 0.03	0.35 ± 0.03	0.24 ± 0.06
C20:0 (Arachidic acid)	0.48 ± 0.04	0.38 ± 0.08	0.60 ± 0.07	0.5 ± 0.08
C20:1 (cis-11-Eicosenoate acid)	0.23 ± 0.01	0.23 ± 0.02	0.40 ± 0.06	0.34 ± 0.06
C20:2 (cis-11,14-Eicosadienoic acid)	0.15 ± 0.04	0.09 ± 0.03	0.07 ± 0.07	0.20 ± 0.04
C20:4n6 (Arachidonic acid)	9.82 ± 0.35	11.68 ± 0.4**	9.64 ± 0.32##	9.37 ± 0.41##
C20:3n3 (cis-11,14,17-Eicosatrienoic acid)	0.00 ± 0.00	0.13 ± 0.03	0.00 ± 0.00	0.13 ± 0.02
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	0.22 ± 0.02	0.05 ± 0.03	0.36 ± 0.02	0.06 ± 0.04
C24:1 (Nervonic acid)	0.30 ± 0.03	0.20 ± 0.06	0.42 ± 0.07	0.28 ± 0.03
C22:6n3 (cis-4,7,10,13,16,19-Docosahexaenoic acid)	6.49 ± 0.12	6.28 ± 0.19	7.30 ± 0.39***	5.21 ± 0.12***++

Compared with the control group, * p <0.05, ** p <0.01; compared with the HFD group, ## p <0.01; compared with the CRS group, ++ P < 0.01.

Sup. Table 5. Fatty acid content changes in liver tissue of 60% HFD-fed mice.

Fatty acids	Fatty acid content of liver (%)			
	Control	60%HFD	CRS	60% HFD+CRS
C13:0 (Tridecylic acid)	0.56 ± 0.10	0.27 ± 0.06	0.27 ± 0.09	0.28 ± 0.06
C14:0 (Myristate acid)	0.16 ± 0.04	0.23 ± 0.02	0.19 ± 0.03	0.23 ± 0.03
C15:0(Pentadecanoate acid)	0.08 ± 0.01	0.03 ± 0.01	0.02 ± 0.01	0.02 ± 0.01
C15:1(cis-10-Pentadecenoate acid)	0.80 ± 0.08	0.62 ± 0.06	0.72 ± 0.06	0.83 ± 0.26
	24.18 ±			
C16:0 (Palmitic acid)	0.68	24.09 ± 0.41	24.84 ± 0.64	24.26 ± 0.70
C16:1(Palmitoleic acid)	1.01 ± 0.16	0.89 ± 0.09	1.52 ± 0.28	1.05 ± 0.15
C17:0 (Heptadecanoate acid)	0.24 ± 0.02	0.20 ± 0.01	0.19 ± 0.01	0.17 ± 0.03
	11.68 ±			
C18:0 (Stearic acid)	0.53	12.2 ± 0.37	11.15 ± 0.45	11.54 ± 0.77
		20.22 ±	12.16 ±	20.15 ±
C18:1n9c (Oleic acid)	8.84 ± 0.61	1.76**	1.22***	2.26***+
C18:2n6t (Linolelaidic acid)	0.68 ± 0.11	0.45 ± 0.11	0.87 ± 0.22	0.48 ± 0.09
	16.98 ±	14.11 ±		
C18:2n6c (Linoleic acid)	0.96	0.31**	15.69 ± 0.80#	14.01 ± 0.56***+
C18:3n6 (γ-Linolenic acid)	0.08 ± 0.03	0.34 ± 0.04	0.00 ± 0.00	0.31 ± 0.05
C18:3n-3 (α-Linolenic acid)	0.30 ± 0.05	0.03 ± 0.03	0.16 ± 0.05	0.07 ± 0.04
C20:0 (Arachidic acid)	0.08 ± 0.04	0.29 ± 0.07	0.07 ± 0.03	0.23 ± 0.10
C20:1 (cis-11-Eicosenoate acid)	0.19 ± 0.05	0.57 ± 0.04	0.13 ± 0.06	0.56 ± 0.07
C20:2 (cis-11,14-Eicosadienoic acid)	0.22 ± 0.08	0.27 ± 0.12	0.16 ± 0.07	0.44 ± 0.09
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	1.59 ± 0.46	1.04 ± 0.10	1.10 ± 0.08	0.80 ± 0.08
		15.84 ±		15.28 ±
C20:4n6 (Arachidonic acid)	9.13 ± 0.25	1.06**	8.53 ± 0.47###	1.35***+
C20:3n3 (cis-11,14,17-Eicosatrienoic acid)	0.00 ± 0.00	0.25 ± 0.09	0.00 ± 0.00	0.24 ± 0.05
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	1.54 ± 0.14	0.00 ± 0.00*	1.79 ± 0.13#	0.00 ± 0.00**+
C22:1n9 (Erucic acid)	0.27 ± 0.23	0.10 ± 0.05	0.09 ± 0.06	0.09 ± 0.04
C24:1 (Nervonic acid)	1.17 ± 0.10	0.25 ± 0.03	1.23 ± 0.09	0.26 ± 0.06
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	19.74 ±			
	0.67	7.48 ± 0.96**	18.67 ± 0.80###	8.36 ± 1.04***+

Compared with the control group, * p <0.05, ** p <0.01; compared with the HFD group, # p <0.05, ### p <0.01; compared with the CRS group, +p <0.01, ++ P < 0.01.

Sup. Table 6. Fatty acid content changes in epididymal adipose of 60% HFD-fed mice.

Fatty acids	Fatty acid content of epididymal adipose (%)			
	Control	60%HFD	CRS	60% HFD+CRS
C12:0 (Lauric acid)	0.05 ± 0.00	0.04 ± 0.00	0.06 ± 0.00	0.04 ± 0.00
C13:0 (Tridecylic acid)	0.05 ± 0.01	0.04 ± 0.01	0.06 ± 0.01	0.03 ± 0.00
C14:0 (Myristate acid)	1.46 ± 0.05	0.86 ± 0.05	1.44 ± 0.05	0.80 ± 0.03
C14:1 (Myristoleate acid)	0.08 ± 0.01	0.03 ± 0.00	0.09 ± 0.01	0.03 ± 0.00
C15:0 (Pentadecanoate acid)	0.20 ± 0.02	0.06 ± 0.00	0.20 ± 0.01	0.06 ± 0.00
C15:1 (cis-10-Pentadecenoate acid)	0.20 ± 0.03	0.08 ± 0.01	0.22 ± 0.02	0.08 ± 0.01
C16:0 (Palmitic acid)	22.76 ± 1.2	19.33 ± 0.8**	21.89 ± 0.97##	18.79 ± 0.52**++
C16:1 (Palmitoleic acid)	5.82 ± 0.65	4.29 ± 0.37**	5.76 ± 0.48##	4.27 ± 0.34**++
C17:0 (Heptadecanoate acid)	0.25 ± 0.01	0.14 ± 0.01	0.25 ± 0.02	0.15 ± 0.01
C17:1 (cis-10-Heptadecenoate acid)	0.24 ± 0.02	0.18 ± 0.01	0.27 ± 0.02	0.19 ± 0.01
C18:0 (Stearic acid)	2.31 ± 0.12	3.32 ± 0.26	2.37 ± 0.11	3.46 ± 0.20*+
C18:1n9t (Elaidic acid)	0.20 ± 0.12	0.03 ± 0.03	0.09 ± 0.06	0.00 ± 0.00
C18:1n9c (Oleic acid)	32.30 ± 1.04	51.61 ± 0.95**	32.14 ± 0.55##	51.78 ± 0.58**++
C18:2n6t (Linolelaidic acid)	0.19 ± 0.09	0.09 ± 0.05	0.03 ± 0.02	0.16 ± 0.07
C18:2n6c (Linoleic acid)	27.04 ± 0.98	17.07 ± 0.15**	28.25 ± 0.97*##	17.17 ± 0.32**++
C18:3n6 (γ-Linolenic acid)	0.15 ± 0.03	0.09 ± 0.03	0.20 ± 0.02	0.10 ± 0.03
C18:3n-3 (α-Linolenic acid)	1.14 ± 0.10	0.33 ± 0.02	1.26 ± 0.05	0.37 ± 0.02
C20:0 (Arachidic acid)	0.21 ± 0.03	0.11 ± 0.01	0.24 ± 0.03	0.11 ± 0.00
C20:1 (cis-11-Eicosenoate acid)	1.61 ± 0.27	0.94 ± 0.05	1.71 ± 0.18	0.97 ± 0.03
C20:2 (cis-11,14-Eicosadienoic acid)	1.07 ± 0.78	0.63 ± 0.18	0.38 ± 0.10	0.69 ± 0.25
C21:0 (Heneicosanoate acid)	0.00 ± 0.00	0.18 ± 0.11	0.09 ± 0.05	0.21 ± 0.09
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	0.18 ± 0.02	0.12 ± 0.01	0.17 ± 0.01	0.12 ± 0.01
C20:4n6 (Arachidonic acid)	0.28 ± 0.02	0.23 ± 0.01	0.24 ± 0.10	0.23 ± 0.02
C20:3n3 (cis-11,14,17-Eicosatrienoic acid)	0.00 ± 0.00	0.02 ± 0.01	0.11 ± 0.07	0.00 ± 0.00
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	0.17 ± 0.04	0.00 ± 0.00	0.29 ± 0.05	0.00 ± 0.00
C22:1n9 (Erucic acid)	0.05 ± 0.02	0.04 ± 0.01	0.10 ± 0.03	0.05 ± 0.01
C24:1 (Nervonic acid)	0.34 ± 0.03	0.01 ± 0.01	0.34 ± 0.03	0.01 ± 0.01
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	1.60 ± 0.14	0.11 ± 0.02**	1.75 ± 0.11##	0.10 ± 0.01***+

Compared with the control group, * p <0.05, ** p <0.01; compared with the HFD group, ## p <0.01; compared with the CRS group, +p <0.05, ++ P < 0.01.

Sup. Table 7. Fatty acid content changes in brain tissue of 60% HFD-fed mice.

Fatty acids	Fatty acid content of brain (%)			
	Control	60%HFD	CRS	60% HFD+CRS
C13:0 (Tridecylic acid)	0.46 ± 0.15	0.45 ± 0.11	0.48 ± 0.16	0.41 ± 0.13
C14:0 (Myristate acid)	0.15 ± 0.02	0.11 ± 0.03	0.09 ± 0.02	0.14 ± 0.00
C15:1 (cis-10-Pentadecenoate acid)	1.66 ± 0.33	1.35 ± 0.17	1.30 ± 0.16	1.30 ± 0.18
C16:0 (Palmitic acid)	24.55 ± 0.38	25.09 ± 0.15	25.09 ± 0.28	24.28 ± 0.26
C16:1 (Palmitoleic acid)	0.6 ± 0.05	0.47 ± 0.08	0.52 ± 0.04	0.43 ± 0.07
C17:0 (Heptadecanoate acid)	0.14 ± 0.04	0.06 ± 0.03	0.08 ± 0.05	0.42 ± 0.27
C17:1 (cis-10-Heptadecenoate acid)	0.96 ± 0.24	0.70 ± 0.25	0.74 ± 0.30	0.37 ± 0.15
C18:0 (Stearic acid)	22.37 ± 0.58	22.97 ± 0.74	22.50 ± 0.97	22.56 ± 0.87
C18:1n9c (Oleic acid)	15.95 ± 1.50	15.03 ± 1.02	15.08 ± 1.64	15.93 ± 1.88
C18:2n6t (Linolelaidic acid)	1.21 ± 0.42	1.98 ± 0.54	1.80 ± 0.51	1.70 ± 0.45
C18:2n6c (Linoleic acid)	0.93 ± 0.20	0.77 ± 0.07	0.60 ± 0.05	0.64 ± 0.10
C20:0 (Arachidic acid)	0.22 ± 0.07	0.24 ± 0.07	0.09 ± 0.06	0.29 ± 0.05
C20:1(cis-11-Eicosenoate acid)	1.20 ± 0.11	1.46 ± 0.21	0.84 ± 0.23	1.58 ± 0.12
C20:2 (cis-11,14-Eicosadienoic acid)	0.00 ± 0.00	0.07 ± 0.05	0.04 ± 0.04	0.05 ± 0.05
C20:3n6 (cis-8,11,14-Eicosatrienoic acid)	0.53 ± 0.02	0.29 ± 0.08	0.43 ± 0.11	0.43 ± 0.03
C20:4n6(Arachidonic acid)	9.01 ± 0.14	10.12 ± 0.37	9.37 ± 0.13	9.94 ± 0.38
C22:1n9 (Erucic acid)	0.11 ± 0.11	0.22 ± 0.10	0.15 ± 0.09	0.14 ± 0.07
C24:1 (Nervonic acid)	0.19 ± 0.05	0.05 ± 0.03	0.11 ± 0.07	0.03 ± 0.03
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	19.5 ± 0.35	18.23 ± 0.51*	20.36 ± 0.52 ^{##}	18.72 ± 0.23 ⁺⁺

Compared with the control group, * p <0.05; compared with the HFD group, ^{##} p <0.01; compared with the CRS group, ⁺⁺ P < 0.01.

Sup. Table 8. Fatty acid content changes in serum for 60% HFD-fed mice.

Fatty acids	Fatty acid content of serum (%)			
	Control	60%HFD	CRS	60% HFD+CRS
C15:1 (cis-10-Pentadecenoate acid)	2.91 ± 0.40	1.83 ± 0.24	3.97 ± 1.03 [#]	3.57 ± 1.12
C16:0 (Palmitic acid)	27.86 ± 2.18	24.19 ± 1.37	29.32 ± 1.89 [#]	25.55 ± 1.60
C16:1 (Palmitoleic acid)	0.65 ± 0.04	0.24 ± 0.06	0.88 ± 0.21	0.34 ± 0.12
C17:0 (Heptadecanoate acid)	0.00 ± 0.00	0.08 ± 0.05	0.04 ± 0.04	0.04 ± 0.04
C17:1 (cis-10-Heptadecenoate acid)	0.00 ± 0.00	0.05 ± 0.05	0.42 ± 0.28	0.19 ± 0.19
C18:0 (Stearic acid)	15.49 ± 1.02	18.54 ± 1.25 [*]	16.23 ± 0.66 [#]	18.36 ± 1.31 [*]
C18:1n9c (Oleic acid)	7.61 ± 0.82	8.99 ± 0.70	9.17 ± 0.91	8.44 ± 0.45
C18:2n6t (Linolelaidic acid)	1.37 ± 1.24	0.53 ± 0.29	0.92 ± 0.29	0.50 ± 0.26
C18:2n6c (Linoleic acid)	22.8 ± 2.74	19.35 ± 1.32 ^{**}	16.81 ± 1.17 ^{**###}	16.03 ± 1.35 ^{**###}
C18:3n6 (γ-Linolenic acid)	0.00 ± 0.00	0.06 ± 0.06	0.09 ± 0.09	0.00 ± 0.00
C18:3n3 (α-Linolenic acid)	0.00 ± 0.00	0.02 ± 0.02	0.15 ± 0.08	0.09 ± 0.05
C20:0 (Arachidic acid)	0.28 ± 0.20	0.20 ± 0.10	0.73 ± 0.20	0.43 ± 0.19
C20:1(cis-11-Eicosenoate acid)	0.00 ± 0.00	0.03 ± 0.03	0.09 ± 0.06	0.00 ± 0.00
C20:4n6(Arachidonic acid)	8.52 ± 1.03	20.50 ± 2.89 ^{**}	7.30 ± 0.81 ^{###}	20.34 ± 2.29 ^{**++}
C20:3n3 (cis-11,14,17-Eicosatrienoic acid)	0.00 ± 0.00	0.50 ± 0.19	0.00 ± 0.00	0.52 ± 0.20
C20:5 (cis-5,8,11,14,17-Eicosapentaenoic acid)	1.62 ± 0.34	0.00 ± 0.00	1.36 ± 0.32	0.11 ± 0.11
C24:1 (Nervonic acid)	0.34 ± 0.23	0.06 ± 0.06	0.58 ± 0.15	0.05 ± 0.05
C22:6n3(cis-4,7,10,13,16,19-Docosahexaenoic acid)	10.55 ± 0.39	4.81 ± 0.63 ^{**}	10.7 ± 0.20 ^{###}	5.45 ± 0.83 ^{**++}

Compared with the control group, * p <0.05, ** p <0.01; compared with the HFD group, [#] p <0.05, ^{###} p <0.01; compared with the CRS group, ++ P < 0.01.