

Supplementary Material

Table S1. Changes in body weight, food intake, and tissue weight among groups in male SD rats.

Variables	ND ^a (A1)	HFD ^b (A2)	HFD+C ^c 30 mg/kg (B1)	HFD+C-NE ^d 30 mg/kg (B2)	HFD+C-NE 60 mg/kg (B3)	HFD+C-NE 90 mg/kg (B4)	HFD+WM ^e (B5)	
Initial body weight (g)	138.3±6.7	138.7±3.8	137.1±7.3	134.9±3.2	133.0±5.5	134.9±4.9	138.7±5.7	
Final body weight (g)	436.6±10.9	534.8±9.9	508.0±9.1	492.3±9.7	480.8±8.67	462.9±9.75	488.1±9.1	
Water intake (g/day)	53.6±5.5	33.3±0.1	36.8±2.0	35.0±3.6	37.1±1.4	34.1±2.3	34.7±1.2	
Food intake (g/day)	29.1±0.8	24.5±0.6	22.7±0.4	23.0±0.7	22.3±0.9	22.7±0.3	22.6±0.1	
Food efficiency (g gain/g consumed)	0.183±0.002	0.289±0.007	0.292±0.003	0.278±0.007	0.278±0.013	0.262±0.008	0.275±0.002	
Total food intake (kg/8 weeks)	1.63±0.08	1.37±0.06	1.27±0.04	1.29±0.07	1.25±0.09	1.26±0.03	1.27±0.01	
Liver weight (g/100g body weight)	3.13±0.54	4.38±0.51	4.17±0.57	4.18±0.51	3.93±0.36	3.80±0.53	4.10±0.55	
Adipose tissue weight(g/100g body weight)	Epididymal	1.39±0.36	2.02±0.41	1.74±0.24	1.70±0.26	1.63±0.33	1.64±0.27	1.65±0.34
	Retroperitoneal	1.67±0.49	2.75±0.32	2.57±0.41	2.55±0.29	2.20±0.38	2.30±0.41	2.18±0.39

Notes: Data are presented as mean ± standard error (n=8).

Abbreviations: a) ND, normal diet; b) HFD, high fat diet; c) C, capsaicin; d) C-NE, capsaicin nanoemulsion; e) WM, wall material.

Table S2. Effects of C-NE on serum lipids, ALT activities.

Plasma Biochemical Values	ND	HFD	HFD+C 30mg/kg (Low dose)	HFD+C-NE 30mg/kg (Low dose)	HFD+C-NE 60mg/kg (Medium dose)	HFD+C-NE 90mg/kg (High dose)	HFD+WM Equal to 90mg/kg
TC ^a (mmol/L)	1.78±0.11	3.80±0.06	3.41±0.07	3.16±0.04	2.91±0.12	2.69±0.07	3.42±0.10
TG ^b (mmol/L)	0.81±0.01	1.27±0.24	1.05±0.21	0.86±0.16	0.7±0.18	0.58±0.12	0.65±0.06
HDLC ^c (mmol/L)	0.58±0.04	0.41±0.02	0.48±0.03	0.50±0.05	0.48±0.03	0.45±0.02	0.43±0.03
LDLC ^d (mmol/L)	0.30±0.02	0.74±0.08	0.69±0.09	0.81±0.09	0.65±0.09	0.50±0.12	0.57±0.05
ALT ^e (U/L)	26.25±2.13	26.78±2.97	25.50±2.49	24.12±2.44	23.43±2.44	24.43±1.46	24.13±1.29

Notes: Data are presented as mean ± standard error (n=8).

Abbreviations: a) TC, total cholesterol; b) TG, triglycerides; c) HDLC, high-density lipoprotein cholesterol; d) LDLC, low-density lipoprotein cholesterol; e) ALT, alanine aminotransferase.

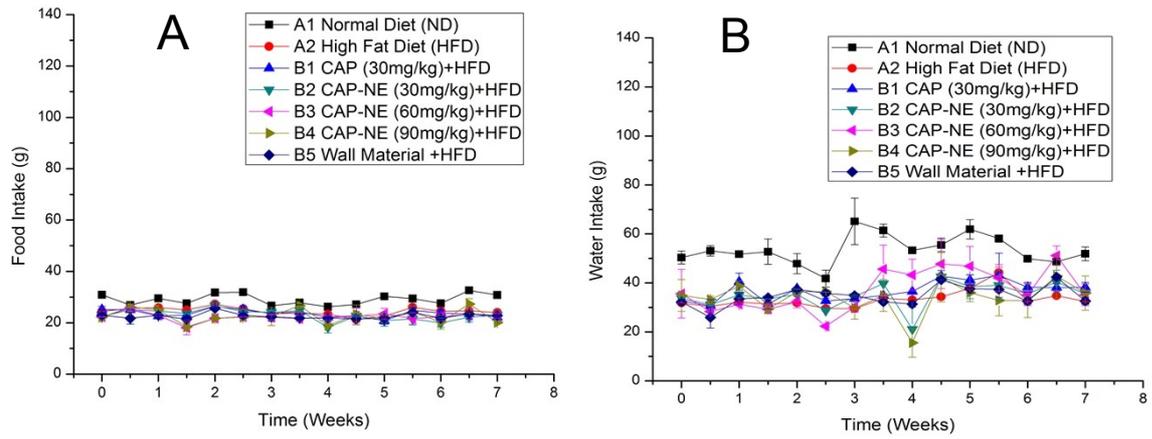


Fig. S1 Chronic oral treatment of CAP and C-NE in male SD rats: (A) food intake of rats for 7 weeks; (B) water intake of rats for 7 weeks. Data are presented as the mean value \pm SE (n = 8); all error bars, SE.